ORDER NO. ACED060223C8

Service Manual

AUTOMOTIVE AFTERMARKET

CQ-C1312NW
WMA MP3 CD Player/Receiver

SPECIFICATIONS

Specifications*

General	
Power Supply	DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Current Consumption	Less than 2.2A (CD mode ; 0.5W 4-channels)
Maximum Power Output	50W×4ch (at 1kHz ; Volume control maximum)
Tone Adjustment Range	Bass ; ±12dB at 100Hz Treble ; ±12dB at 10kHz
Speaker Impedance	4-8
Pre-Amp Output Voltage	2.5V (CD mode ; 1kHz 0dB)
Pre-Amp Output Impedance	200
FM	
Frequency Range	87.5MHz - 108MHz
Usable Sensitivity	6dB/ V (S/N 30dB)
Stereo Separation	35dB (1kHz)
AM (MW)	
Frequency Range	531kHz - 1,602kHz
Usable Sensitivity	28dB/ V (S/N 20dB)
AM (LW)	
Frequency Range	153kHz - 279kHz

Usable Sensitivity	**32dB/ V (S/N 20dB)**
CD Player	
Sampling Frequency	**8 Times Oversampling**
DA Converter	**1bit DAC System**
Pick-Up Type	**Astigma 3-beam**
Light Source	**Semiconductor Laser**
Wave Length	**790nm**
Frequency Response	**20Hz to 20kHz (±1dB)**
Signal to Noise Ratio	**96dB**
Total Harmonic Distortion	**0.01% (1kHz)**
Wow and Flutter	**Below measurable limits**
Channel Separation	**75dB**
Dimensions**	**178×50×160mm**
Weight**	**1.3kg**

*** Specifications and the design are subject to possible modification without notice due to improvements.**
**** Dimensions and Weight shown are approximate.**
-Above specifications comply with EIA standards.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

1. ABOUT LEAD FREE SOLDER (PbF)

Distinction of PbF PCB:

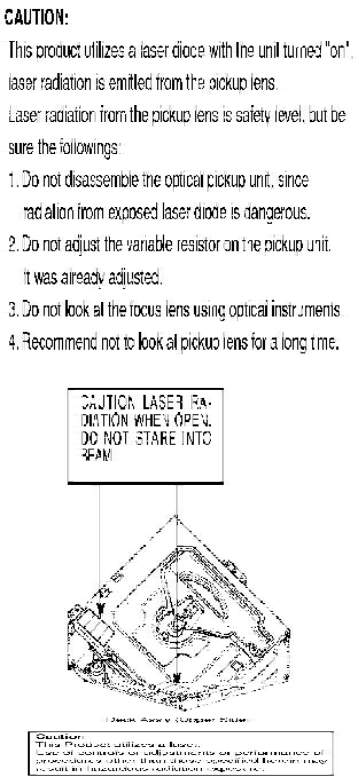
PCBs (manufactured) using lead free solder will have a PbF stamp on the PCB.

Caution :

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a soldering iron with temperature control and adjust it to 700 ± 20°F (370 ± 10°C). In case of using high temperature soldering iron, please be careful not to heat too long.

- **Pb free solder will tend to splash when heated too high (about 1100°F/ 600°C)**
- **This lead free solder will be used for the products after serial No. 1,000,001.**

2. LASER PRODUCTS


CAUTION:
This product utilizes a laser diode with the unit turned "on", laser radiation is emitted from the pickup lens.
Laser radiation from the pickup lens is safety level, but be sure the followings:
1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.
CAUTION: LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM

3. FEATUERS

- **Digital servo for reliable playback.**
- **PLL (Phase Locked Loop) synthesized tuning.**
- **18-FM, 6-AM presets with preset scan.**
- **Removable face plate.**
- **MP3/WMA Playback from CD-R/RW.**

4. REPLACING THE FUSE

Use fuses of the same specified rating (15amps). Using different substitutes or fuses with higher ratings, or connecting the product directly without a fuse, could cause fire or damage to the stereo unit.

5. MAINTENANCE

Your product is designed and manufactured to ensure a minimum of maintenance. Use a dry, a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.

6. NOTES

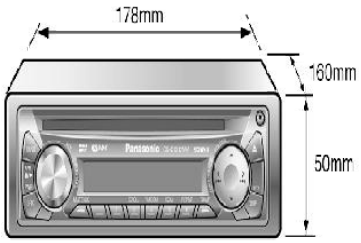
[RADIO BLOCK]

Do not align the AM/FM package block. When the package block is necessary, it will be supplied already aligned at the factory.

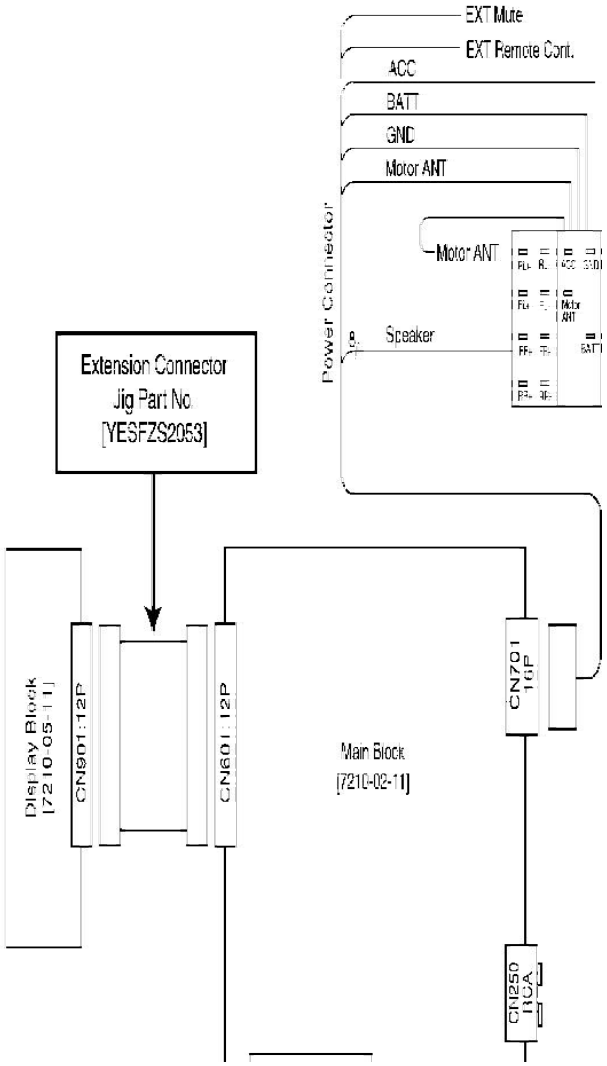
[CD DECK BLOCK]

This model has no servo alignment points because microcomputer controls the servo circuit.

7. DIMENSIONS



8. WIRING CONNECTION


EXT Mute
EXT Remote Cont.
ACC
BATT
GND
Motor ANT
Power Connector
Motor ANT
Speaker
Extension Connector
Jig Part No.
[YESFZS2053]
Display Block
[7210-05-11]
CN901 12P
CN601 12P
Main Block
[7210-02-11]
CN701
16P
CN250
11CA

9. TERMINALS DESCRIPTION

9.1. Main Block

IC601 : YESAM281

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
1	(NC)	-	-	-	-	-
2	VSM	Radio signal strength	I	0	0	0
3	SD/ST	Radio station detect	I	0.3	0	0.8
4	AVSS	Ground	-	0	0	0
5	SCL	Audio control serial clock	O	4.9	4.9	4.9
6	SDA	Audio control data	O	4.9	4.9	4.9
7	AVREF	(Conecting to +5V)	-	4.9	4.9	4.9
8	CD SO	CD data output	I	2.1	2.3	1.7
9	CD SI	CD data input	O	0	0	3.3
10	CD SCK	CD clock	O	4.7	4.7	4.7
11	CDC DATA/ XM-TX SO (NC)	-	-	-	-	-
12	XM-RX SI (NC)	-	-	-	-	-
13	CDC CLK (NC)	-	-	-	-	-
14	CDC REM (NC)	-	-	-	-	-
15	BZ OUT (NC)	-	-	-	-	-
16	LCD DO	LCD data	I	4.8	4.8	4.8
17	LCD DI	LCD data	O	4.7	4.7	4.7
18	LCD CLK	LCD Clock	O	4.8	4.8	4.8
19	CD MUTE	CD mute	I	0	0	4.8
20	CD RST	CD reset	O	4.8	4.8	4.8
21	CD STB	CD strobe	I	3.7	3.7	3.7
22	CDC SENS (NC)	-	-	-	-	-
23	PLL DO	PLL data	I	4.9	4.9	4.9
24	PLL CLK	PLL data clock	O	4.8	4.8	4.8
25	PLL DI	PLL data	O	0	0	0
26	PLL CE	PLL chip select	O	0	0	0
27	(NC)	-	-	-	-	-
28	(NC)	-	-	-	-	-
29	(NC)	-	-	-	-	-
30	(NC)	-	-	-	-	-
31	(NC)	-	-	-	-	-
32	(NC)	-	-	-	-	-

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
33	VSS1	Ground	-	0	0	0
34	RDS DATA	RDS data	I	0	0	0
35	S-LED	LED control	O	0	0	0
36	LCD CE	LCD chip enable	O	0	0	0
37	LCD 5V CNT	Display 5V control	O	0	0	0
38	EJ ILL (NC)	-	-	-	-	-
39	OP/CL (NC)	-	-	-	-	-
40	(NC)	-	-	-	-	-
41	EJECT (NC)	-	-	-	-	-
42	ROTARY 1	Rotary encoder input 1	I	4.8	4.8	4.8
43	ROTARY 2	Rotary encoder input 2	I	4.7	4.7	4.7
44	(NC)	-	-	-	-	-
45	(NC)	-	-	-	-	-
46	PANEL	Panel detection	I	4.6	4.6	4.6
47	STBY	Power IC stundby control	O	4.8	4.8	4.8
48	EEPROM CE	(Not Used)	-	-	-	-
49	EEPROM SK (NC)	-	-	-	-	-
50	EEPROM DI (NC)	-	-	-	-	-
51	EEPROM DO	(Not Used)	-	-	-	-
52	CDC1/2 (NC)	-	-	-	-	-
53	INV CNT	Illumination control	O	4.8	4.8	4.8
54	AMP CNT	Amp power control	O	4.8	4.8	4.8
55	ANT CNT	Antenna power control	O	4.8	4.8	4.8
56	EXT.MUTE	External mute	O	4.8	4.8	4.8
57	MAIN CNT	Main power control	O	4.8	4.8	4.8
58	AMP MUTE	Amp mute control	O	4.8	4.8	4.8
59	AF MUTE	AF mute control	O	4.8	4.8	4.8
60	RESET	Reset	I	4.8	4.8	4.8
61	RDS CLK	RDS clock	I	0	0	0
62	(NC)	-	-	-	-	-
63	(NC)	-	-	-	-	-
64	RM DATA	Remote control data	I	4.8	4.8	4.8
65	BATT	Battery voltage detection	I	4.5	4.5	4.5
66	CDC STB/ / XM DET (NC)	-	-	-	-	-

Pin No.	Port	Description	I/O	(V)		
				FM	AM	CD
67	VSS0	Ground	-	0	0	0
68	VDD1	+5V power supply	-	4.8	4.8	4.8
69	X2	Crystal oscillator	-	2.9	2.9	2.9
70	X1	Crystal oscillator	-	2.3	2.3	2.3
71	TEST	(TEST terminal)	-	0	0	0
72	XT2	Crystal oscillator	-	2.7	2.7	2.7
73	XT1	Crystal oscillator	-	2	2	2
74	VDD0	+5V power supply	-	4.9	4.9	4.9
75	AVDD	+5V power supply	-	4.8	4.8	4.8
76	INI A	Mode setting A	I	0	0	0
77	INI B	Mode setting B	I	0	0	0
78	ACC	ACC detection	I	4.9	4.9	4.9
79	(NC)	(Connecting to ground)	-	0	0	0
80	LEVEL	(Connecting to ground)	-	0	0	0

9.2. Display Block

IC901 : C0HBA0000195

Pin No.	Port	Description	I/O	(V)
1-35	SEG1-35	LCD segment data	O	2.5
36-39	SEG36-39	Not used	-	-
40-43	COM1-4	LCD common	O	2.5
44	SEG40	Not used	-	-
45-49	KS2-6	Key scan	O	5.0
50-54	KI1-5	Key data	I	0
55	TEST	(Connecting to ground)	-	0
56	VDD	+5V power supply	-	5.0
57	VDD1	VDD1 filter terminal	-	3.3
58	VDD2	VDD2 filter terminal	-	1.7
59	VSS	Ground	-	0
60	OSC	Oscillator terminal	-	3.9
61	DO	Key data output	O	5.0
62	CE	LCD driver chip enable	I	0
63	CLK	LCD clock	I	4.9
64	DI	LCD data	I	4.9

9.3. CD Servo Block

IC401 : YESAM348

Pin No.	Port	Descriptions	I/O	(V)
1	CVSS1	GND	-	0
2	-	-	-	-
3	CVSS2	GND	-	0
4	DVDD1	I/O system (3.3V) power supply	-	3.3
5	A10	Address bus of FLASH ROM	O	0
6	-	-	-	-
7	A11	Address bus of FLASH ROM	O	3.3
8	A12		O	3.3
9	A13		O	3.3
10	A14		O	3.3
11	A15		O	3.3
12	/ CVDD1	CORE CPU system (1.6V) power supply	-	1.6
13	-	-	-	-
14	DVSS1	GND	-	0
15	CVSS3	GND	-	0
16	/ CVDD2	I/O system (3.3V) power supply	-	1.6
17	-	-	-	-
18	-	-	-	-
19	READY	-	-	3.3
20	/PS	FLASH ROM selection signal	O	3.3
21	-	-	-	-
22	-	-	-	-
23	R/W	Lead/light signal to FLASH ROM	O	3.3
24	/ MSTRB	Memory access signal	O	3.3
25	-	-	-	-
26	/MSC	-	-	3.3
27	MUTE	Mute signal output (H:Mute on)	O	0
28	-	-	-	-
29	-	-	-	-
30	/HOLD	-	-	3.3
31	BIO	SUBO input	I	0
32	MP/MC	Operation mode setting (external pull-up)	I	3.3
33	DVDD2	I/O system (3.3V) power supply	-	3.3
34	CVSS4	GND	-	0
35	BD R1	GND	I	0
36	-	-	-	-
37	CVSS5	GND	-	0
38	-	-	-	-

Pin No.	Port	Descriptions	I/O	(V)
39	-	-	-	-
40	DVSS2	GND	-	0
41	CLK CM	AUDIO bit clock input	I	1.6
42	SCK	Clock input	I	3.3
43	LRCK C M	AUDIO L/R identifying signal input	I	1.6
44	CDFS	Serial frame sink signal input	I	2.6
45	DATA CM	AUDIO serial data input	I	1.6
46	-	-	-	-
47	SI	Serial data input	I	0
48	CLK M C	AUDIO bit clock output	O	1.6
49	SCK	Clock input	I	3.3
50	CVSS6	GND	-	0
51	-	-	-	-
52	CVDD3	CORE CPU system (1.6V) power supply	-	1.6
53	LRCK M C	AUDIO L/R identifying signal output	O	1.6
54	CDFS	Serial frame sink signal input	I	2.4
55	-	-	-	-
56	DVDD3	I/O system (3.3V) power supply	-	3.3
57	DVSS3	GND	-	0
58	REST SW	Mechanics deck REST SW input	I	3.3
59	DATA M C	AUDIO serial data output	O	1.6
60	SO	Serial data output	O	1.2
61	-	-	-	-
62	-	-	-	-
63	/NMI	-	-	3.3
64	/INT0	-	-	3.3
65	/INT1	-	-	3.3
66	BLKCK	Subcode block clock pulse input	I	0
67	/INT3	-	-	3.3
68	CV DD4	CORE CPU system (1.6V) power supply	-	1.6
69	SW1	Mechanics deck SW1 input	I	0
70	CVSS7	GND	-	0
71	MCLK	Clock output (To Servo DSP)	O	3.3
72	DVSS4	GND	-	0

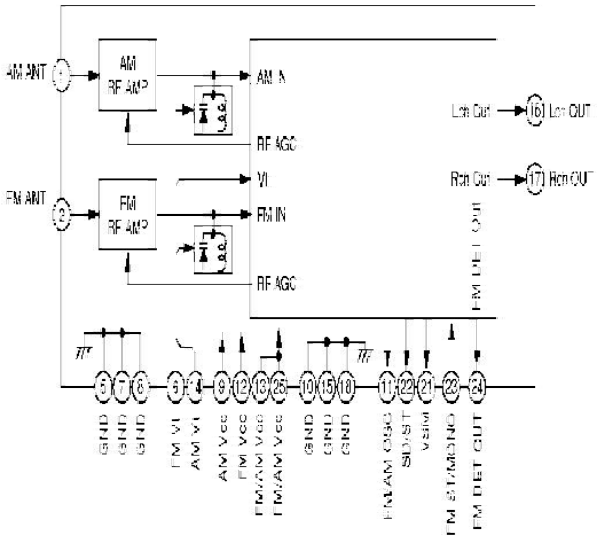
Pin No.	Port	Descriptions	I/O	(V)
73	MLD	Command load signal output (To Servo DSP)	I	3.3
74	MDATA	Command data output (To Servo DSP)	O	3.3
75	DVDD4	I/O system (3.3V) power supply	-	3.3
76	DVSS5	GND	-	0
77	CLK MD1	Clock mode setting (L fixation)	I	0
78	CLK MD2	Clock mode setting (H fixation)	I	3.3
79	CLK MD3	Clock mode setting (L fixation)	I	-
80	-	-	-	-
81	SW2	Mechanics deck SW2 input	I	0
82	-	-	-	-
83	EMU0	-	-	0
84	EMU/ OFF	-	-	3.3
85	TDO	-	-	3.3
86	TDI	-	-	0
87	/TRST	-	-	3.3
88	TCK	-	-	0
89	TMS	-	-	3.3
90	CVSS8	GND	-	3.3
91	CVDD5	CORE CPU system (1.6V) power supply	-	0
92	HPIENA	GND	I	1.6
93	DVSS6	GND	-	0
94	-	-	-	-
95	CLKENA	Oscillation output Cainabl signal	O	3.3
96	X1	Crystal Connection	O	0
97	X2/ CLKIN	Crystal Connection	I	0
98	RS	Reset signal input	I	1
99	D0	Data base of FLASH ROM	I/O	3.4
100	D1		I/O	0
101	D2		I/O	0
102	D3		I/O	0
103	D4		I/O	0
104	D5		I/O	0
105	A16	Address bus of FLASH ROM	O	0
106	DVSS7	GND	-	0
107	A17	Address bus of FLASH ROM	O	3.3
108	A18		O	0
109	A19	Address bus of FLASH ROM	O	0

Pin No.	Port	Descriptions	I/O	(V)
110	A20		O	0
111	CVSS9	GND	-	0
112	DVDD5	I/O system (3.3V) power supply	-	3.3
113	D6	Data bus of FLASH ROM	I/O	0
114	D7		I/O	0
115	D8		I/O	0
116	D9		I/O	0
117	D10		I/O	0
118	D11	Data bus of FLASH ROM	I/O	0
119	D12		I/O	0
120	STAT	Status signal input	I	0.4
121	D13	Data path of FLASH ROM	I/O	0
122	D14		I/O	0
123	D15		I/O	0
124	-	-	-	-
125	CVDD6	CORE CPU system (1.6V) power supply	-	1.6
126	CVSS10	GND	-	0
127	-	-	-	-
128	DVSS8	I/O system (3.3V) power supply	-	0
129	-	-	-	-
130	DVDD6	I/O system (3.3V) power supply	-	3.3
131	A0	Address bus of FLASH ROM	O	0
132	A1		O	0
133	A2		O	3.3
134	A3		O	3.3
135	/RST	Reset signal output (To Servo DSP)	O	3.3
136	A4	Address bus of FLASH ROM	O	3.3
137	A5		O	0
138	A6		O	3.3
139	A7		O	3.3
140	A8		O	0
141	A9		O	3.3
142	CVDD7	CORE CPU system (1.6V) power supply	-	1.6
143	-	-	-	-
144	DVSS9	GND	-	0

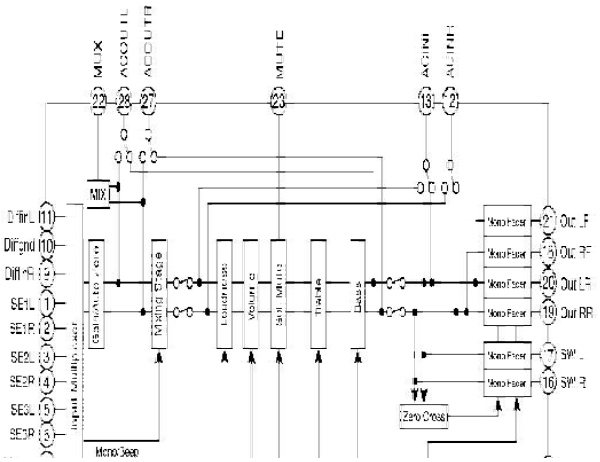
10. PACKAGE AND IC BLOCK DIAGRAM

10.1. Main Block

PA051 : YESAP403

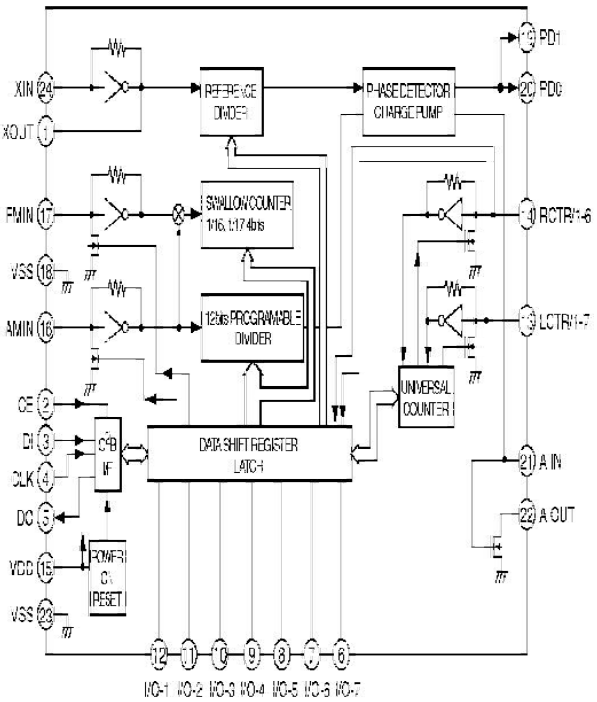


IC201 : YESAM293

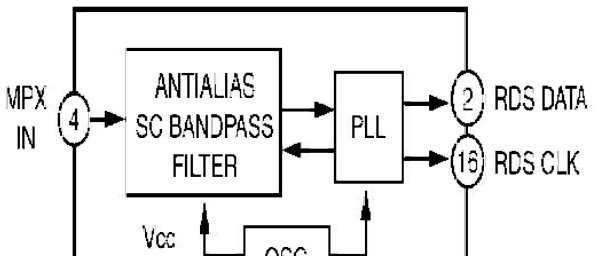


IC271 : C1EA00000041

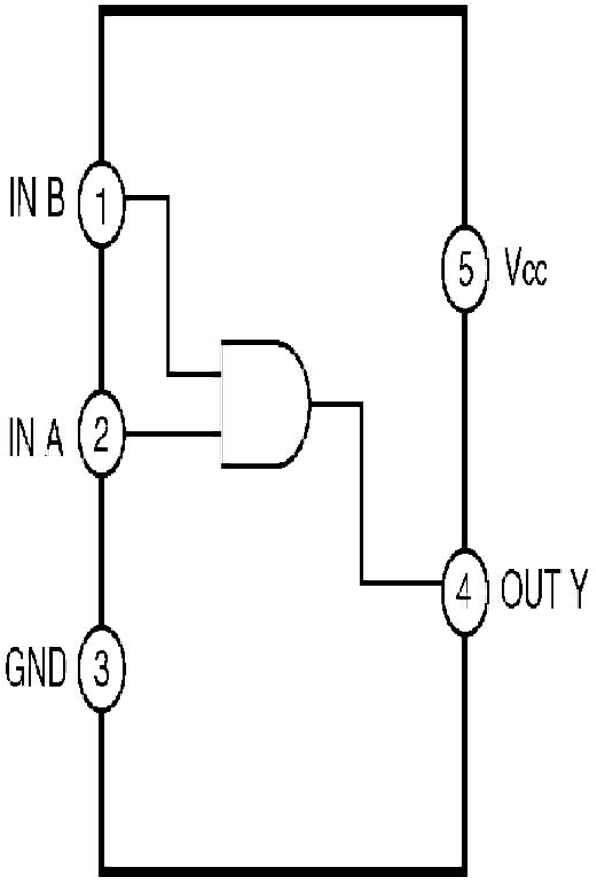
IC401 : C1BB00001045



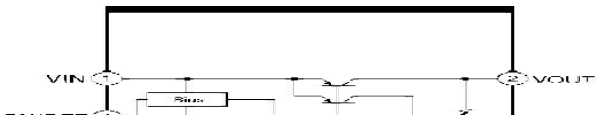
IC501 : YESAM283



IC681 : YESAM273

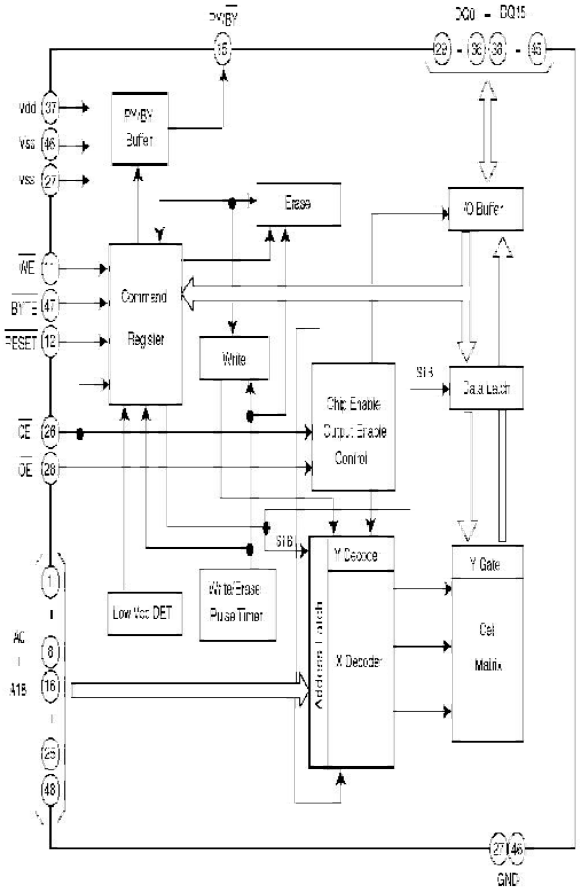


IC750 : YESAM267



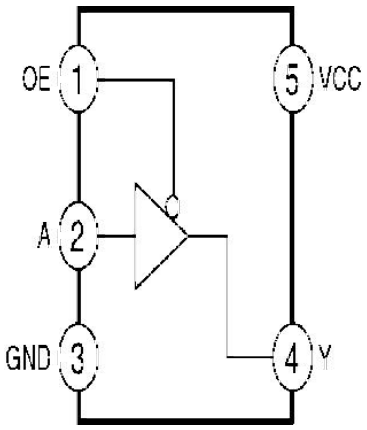
10.2. CD Servo Block

IC402 : YESAM353

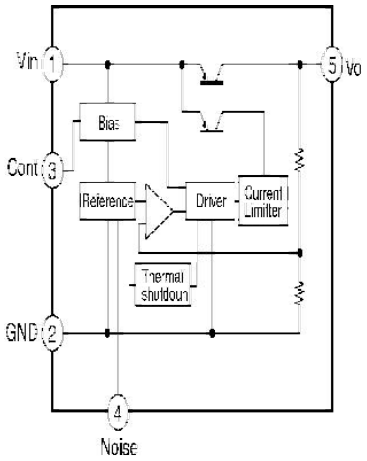


IC403 : YESAM171

IC405 : YESAM270



IC404 : YESAM178



11. REPLACEMENT PARTS LIST

Notes :

1. **Be sure to make your orders of replacement parts according to this list.**
2. **Important safety notice: Components, identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.**
3. **Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.**
4. **The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**

   - Order intake period is basically six months after the first shipment.

Ref. No.	Part No.	Part Name & Description	Remarks
[7210-02-11] MAIN BLOCK			
IC's and TRANSISTORs			
IC201	YESAM293	IC	
IC271	C1EA00000041	IC	
IC401	C1BB00001045	IC	
IC501	YESAM283	IC	
IC601	YESAM281	IC	
IC681	YESAM273	IC	
IC710	YESAM277	IC	
IC740	YESAM269	IC	
IC750	YESAM267	IC	
IC755	YESAM263	IC	
PA051	YESAP403	Tuner Pack	
Q052	YESAN082	Transistor	
Q054	B1GBCFNN0009	Transistor	
Q055	YESAN082	Transistor	
Q066	YESAN091	Transistor	
Q262	YESAN085	Transistor	
Q266	YESAN085	Transistor	
Q362	YESAN085	Transistor	
Q366	YESAN085	Transistor	
Q411	B1CBGF000005	FET	
Q660	YESAN081	Transistor	
Q661	YESAN080	Transistor	
Q681	YESAN084	Transistor	
Q720	YESAN093	FET	
Q721	YESAN084	Transistor	
Q730	YESAN093	FET	
Q731	YESAN084	Transistor	
Q740	YESAN079	Transistor	
Q751	YESAN087	Transistor	
Q761	YESAN090	Transistor	
Q770	YESAN088	Transistor	
DIODEs			
D270	YESAD146	Diode	
D271	YESAD146	Diode	
D272	YESAD146	Diode	
D273	YESAD146	Diode	
D274	YESAD146	Diode	
D275	YESAD146	Diode	
D276	YESAD146	Diode	
D277	YESAD146	Diode	
D671	YESAD143	Diode	
D672	YESAD143	Diode	
D681	YESAD149	Diode	
D683	YESAD133	Zener Diode	
D684	YESAD133	Zener Diode	
D685	YESAD133	Zener Diode	
D689	YESAD133	Zener Diode	
D701	YESAD139	Diode	
D702	YESAD119	Zener Diode	
D710	YESAD144	Diode	
D720	YESAD146	Diode	
D740	YESAD146	Diode	
D741	YEAD1SS133T	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
D750	YESAD141	Diode	
D760	YESAD146	Diode	
D761	YESAD140	Diode	
D770	YESAD123	Zener Diode	
D790	YESAD143	Diode	
CAPACITORs			
C051	YECUS1H470JC	Ceramic, 47pF 50WV	
C053	YESCC234	Ceramic, 0.01 μ F 50WV	
C055	YESCC234	Ceramic, 0.01 μ F 50WV	
C059	F1J1H101A025	Ceramic, 100pF 50WV	
C061	YESCC327	Ceramic, 0.018 μ F 50WV	
C062	YESCC327	Ceramic, 0.018 μ F 50WV	
C065	YESCC233	Ceramic, 0.001 μ F 50WV	
C066	YESCC226	Ceramic, 470pF 50WV	
C067	YESCC234	Ceramic, 0.01 μ F 50WV	
C203	YESCC314	Electrolytic, 3.3 μ F 50WV	
C208	YESCC230	Ceramic, 0.33 μ F 16WV	
C210	YESCC228	Ceramic, 0.1 μ F 16WV	
C220	YESCC375	Electrolytic, 2.2 μ F 50WV	
C261	YESCC372	Electrolytic, 4.7 μ F 25WV	
C263	YECUS1C474KX	Ceramic, 0.47 μ F 16WV	
C265	YESCC372	Electrolytic, 4.7 μ F 25WV	
C267	YECUS1C474KX	Ceramic, 0.47 μ F 16WV	
C268	YECUS1C474KX	Ceramic, 0.47 μ F 16WV	
C269	YECUS1C474KX	Ceramic, 0.47 F 16WV	
C271	YESCC235	Ceramic, 0.0047 F 50WV	
C272	YESCC235	Ceramic, 0.0047 F 50WV	
C276	YESCC393	Electrolytic, 47 F 16WV	
C277	YESCC229	Ceramic, 1 F 16WV	
C278	YECUS1H104KX	Ceramic, 0.1 F 50WV	
C279	YESCC368	Electrolytic, 2200 F 16WV	
C280	YESCC191	Ceramic, 2.2 F	
C281	YESCC191	Ceramic, 2.2 F	
C292	YESCC234	Ceramic, 0.01 F 50WV	
C303	YESCC314	Electrolytic, 3.3 F 50WV	
C308	YESCC230	Ceramic, 0.33 F 16WV	
C309	YESCC366	Electrolytic, 10 F 16WV	
C310	YESCC313	Electrolytic, 220 F 10WV	
C320	YESCC375	Electrolytic, 2.2 F 50WV	
C325	F1J1H221A665	Ceramic, 220pF 50WV	
C361	YESCC372	Electrolytic, 4.7 F 25WV	
C363	YECUS1C474KX	Ceramic, 0.47 F 16WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C365	YESCC372	Electrolytic, 4.7 μ F 25WV	
C367	YECUS1C474KX	Ceramic, 0.47 μ F 16WV	
C368	YECUS1C474KX	Ceramic, 0.47 μ F 16WV	
C371	YESCC235	Ceramic, 0.0047 μ F 50WV	
C372	YESCC235	Ceramic, 0.0047 μ F 50WV	
C375	YESCC366	Electrolytic, 10 μ F 16WV	
C378	YECUS1H104KX	Ceramic, 0.1 μ F 50WV	
C401	YESCC219	Ceramic, 10pF 50WV	
C402	YESCC245	Ceramic, 12pF 50WV	
C403	YESCC376	Electrolytic, 100 μ F 6.3WV	
C404	YESCC234	Ceramic, 0.01 μ F 50WV	
C405	F1J1H101A025	Ceramic, 100pF 50WV	
C411	YESCC234	Ceramic, 0.01 μ F 50WV	
C412	YESCC344	Ceramic, 0.015 μ F 50WV	
C413	ECQV1H104JL2	Plastic Film, 0.1 μ F 50WV	
C417	YESCC371	Electrolytic, 680 μ F 16WV	
C430	YESCC313	Electrolytic, 220 μ F 10WV	
C501	YESCC223	Ceramic, 27pF 50WV	
C502	YESCC219	Ceramic, 10pF 50WV	
C505	YESCC228	Ceramic, 0.1 μ F 16WV	
C506	YESCC234	Ceramic, 0.01 μ F 50WV	
C507	YESCC224	Ceramic, 270pF 50WV	
C508	YESCC366	Electrolytic, 10 μ F 16WV	
C509	YESCC392	Electrolytic, 22 μ F 10WV	
C602	YESCC378	Electrolytic, 1000 μ F 6.3WV	
C605	YESCC234	Ceramic, 0.01 F 50WV	
C628	YESCC228	Ceramic, 0.1 F 16WV	
C631	YESCC229	Ceramic, 1 F 16WV	
C634	YECUS1H220JC	Ceramic, 22pF 50WV	
C635	YECUS1H220JC	Ceramic, 22pF 50WV	
C660	YESCC375	Electrolytic, 2.2 F 50WV	
C671	YESCC233	Ceramic, 0.001 F 50WV	
C672	YESCC377	Electrolytic, 47 F 6.3WV	
C681	YESCC228	Ceramic, 0.1 F 16WV	
C682	YESCC234	Ceramic, 0.01 F 50WV	
C701	YESCC374	Electrolytic, 1 F 50WV	
C710	YESCC284	Ceramic, 0.18 F 50WV	
C711	YESCC234	Ceramic, 0.01 F 50WV	
C740	YESCC369	Electrolytic, 470 F 16WV	
C741	YESCC379	Electrolytic, 150 F 6.3WV	
C751	YESCC370	Electrolytic, 1000 F 16WV	
C752	YESCC365	Electrolytic, 120 F 10WV	
C753	YESCC377	Electrolytic, 47 F 6.3WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C755	YESCC228	Ceramic, 0.1 μF 16WV	
C756	YESCC380	Electrolytic, 39 μF 6.3WV	
C770	YESCC367	Electrolytic, 100 μF 16WV	
C790	YECUS1H104KX	Ceramic, 0.1 μF 50WV	
RESISTORs			
J801	YESRG132	Chip, 0 Ω 1/4W	
J802	YESRG132	Chip, 0 Ω 1/4W	
J803	YESRG132	Chip, 0 Ω 1/4W	
J804	YESRG132	Chip, 0 Ω 1/4W	
J805	YESRG132	Chip, 0 Ω 1/4W	
J807	YESRG132	Chip, 0 Ω 1/4W	
J808	YESRG132	Chip, 0 Ω 1/4W	
J809	YESRG132	Chip, 0 Ω 1/4W	
J810	YESRG132	Chip, 0 Ω 1/4W	
J811	YESRG132	Chip, 0 Ω 1/4W	
J812	YESRG132	Chip, 0 Ω 1/4W	
J813	YESRG132	Chip, 0 Ω 1/4W	
J814	YESRG132	Chip, 0 Ω 1/4W	
J815	YESRG132	Chip, 0 Ω 1/4W	
J816	YESRG132	Chip, 0 Ω 1/4W	
J817	YESRG132	Chip, 0 Ω 1/4W	
J818	YESRG132	Chip, 0 Ω 1/4W	
J819	YESRG132	Chip, 0 Ω 1/4W	
J820	YESRG132	Chip, 0 Ω 1/4W	
J821	YESRG132	Chip, 0 Ω 1/4W	
J823	YESRG132	Chip, 0 1/4W	
J824	YESRG132	Chip, 0 1/4W	
J825	YESRG132	Chip, 0 1/4W	
J826	YESRG132	Chip, 0 1/4W	
J827	YESRG132	Chip, 0 1/4W	
J828	YESRG132	Chip, 0 1/4W	
J829	YESRG132	Chip, 0 1/4W	
J830	ERJ8GX0R00V	Chip, 0 1/4W	
J831	YESRG132	Chip, 0 1/4W	
J832	YESRG132	Chip, 0 1/4W	
J833	YESRG132	Chip, 0 1/4W	
J835	YESRG132	Chip, 0 1/4W	
J837	YESRG132	Chip, 0 1/4W	
J838	YESRG132	Chip, 0 1/4W	
J839	YESRG132	Chip, 0 1/4W	
J840	YESRG132	Chip, 0 1/4W	
J901	YESRG093	Chip, 0 1/8W	
J902	YESRG093	Chip, 0 1/8W	
J905	YESRG093	Chip, 0 1/8W	
J906	YESRG093	Chip, 0 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
L291	YESRG093	Chip, 0 Ω 1/8W	
R050	YESRG127	Chip, 5.6 Ω 1/8W	
R051	YESRG132	Chip, 0 Ω 1/4W	
R052	YESRG094	Chip, 100 Ω 1/8W	
R053	YESRG246	Chip, 120 Ω 1/8W	
R058	YESRG093	Chip, 0 Ω 1/8W	
R059	YESRG097	Chip, 100k Ω 1/8W	
R060	YESRG115	Chip, 33k Ω 1/8W	
R065	YESRG117	Chip, 3.9k Ω 1/8W	
R066	YESRG182	Chip, 330k Ω 1/8W	
R067	YESRG108	Chip, 2.2k Ω 1/8W	
R068	YESRG095	Chip, 1k Ω 1/8W	
R202	YESRG184	Chip, 4.3k Ω 1/8W	
R203	YESRG115	Chip, 33k Ω 1/8W	
R208	YESRG202	Chip, 18k Ω 1/4W	
R225	YESRG205	Carbon, 1k Ω 1/4W	
R226	YESRG205	Carbon, 1k Ω 1/4W	
R261	YESRG103	Chip, 180 Ω 1/8W	
R262	YESRG096	Chip, 10k Ω 1/8W	
R263	YESRG124	Chip, 560 Ω 1/8W	
R265	YESRG103	Chip, 180 Ω 1/8W	
R266	YESRG096	Chip, 10k Ω 1/8W	
R267	YESRG124	Chip, 560 Ω 1/8W	
R275	YESRG109	Chip, 22k Ω 1/8W	
R280	YESRG212	Chip, 130 Ω 1/8W	
R291	YESRG093	Chip, 0 Ω 1/8W	
R302	YESRG184	Chip, 4.3k Ω 1/8W	
R303	YESRG115	Chip, 33k 1/8W	
R308	YESRG202	Chip, 18k 1/4W	
R325	YESRG096	Chip, 10k 1/8W	
R326	YESRG096	Chip, 10k 1/8W	
R361	YESRG103	Chip, 180 1/8W	
R362	YESRG096	Chip, 10k 1/8W	
R363	YESRG124	Chip, 560 1/8W	
R365	YESRG103	Chip, 180 1/8W	
R366	YESRG096	Chip, 10k 1/8W	
R367	YESRG124	Chip, 560 1/8W	
R375	YESRG137	Chip, 12k 1/4W	
R391	YESRG093	Chip, 0 1/8W	
R401	YESRG133	Chip,10 1/4W	
R402	YESRG124	Chip, 560 1/8W	
R403	YESRG100	Chip, 1.5k 1/8W	
R404	YESRG132	Chip, 0 1/4W	
R405	YESRG206	Carbon, 2.2k 1/4W	
R406	YESRG208	Carbon, 47k 1/4W	
R407	YESRG104	Chip, 1.8k 1/8W	
R408	YESRG108	Chip, 2.2k 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
R409	YESRG108	Chip, 2.2k Ω 1/8W	
R410	YESRG108	Chip, 2.2k Ω 1/8W	
R411	YESRG108	Chip, 2.2k Ω 1/8W	
R412	YESRG147	Chip, 4.7k Ω 1/4W	
R413	YESRG148	Chip, 47k Ω 1/4W	
R414	YESRG094	Chip, 100 Ω 1/8W	
R416	YESRG108	Chip, 2.2k Ω 1/8W	
R417	YESRG094	Chip, 100 Ω 1/8W	
R418	YESRG132	Chip, 0 Ω 1/4W	
R501	YESRG180	Chip, 2.2M Ω 1/8W	
R506	YESRG096	Chip, 10k Ω 1/8W	
R507	YESRG135	Chip, 10k Ω 1/4W	
R601	YESRG147	Chip, 4.7k Ω 1/4W	
R602	YESRG134	Chip, 1k Ω 1/4W	
R603	YESRG120	Chip, 47k Ω 1/8W	
R604	YESRG120	Chip, 47k Ω 1/8W	
R608	YESRG119	Chip, 4.7k Ω 1/8W	
R609	YESRG093	Chip, 0 Ω 1/8W	
R610	YESRG214	Chip, 180k Ω 1/8W	
R611	YESRG135	Chip, 10k Ω 1/4W	
R612	YESRG189	Chip, 100 Ω 1/4W	
R613	YESRG136	Chip, 100k Ω 1/4W	
R614	YESRG136	Chip, 100k Ω 1/4W	
R615	YESRG095	Chip, 1k Ω 1/8W	
R616	YESRG095	Chip, 1k Ω 1/8W	
R617	YESRG095	Chip, 1k Ω 1/8W	
R618	YESRG095	Chip, 1k Ω 1/8W	
R619	YESRG095	Chip, 1k 1/8W	
R620	YESRG095	Chip, 1k 1/8W	
R621	YESRG095	Chip, 1k 1/8W	
R622	YESRG097	Chip, 100k 1/8W	
R623	YESRG097	Chip, 100k 1/8W	
R624	YESRG097	Chip, 100k 1/8W	
R625	YESRG097	Chip, 100k 1/8W	
R626	YESRG097	Chip, 100k 1/8W	
R627	YESRG119	Chip, 4.7k 1/8W	
R628	YESRG119	Chip, 4.7k 1/8W	
R629	YESRG119	Chip, 4.7k 1/8W	
R630	YESRG095	Chip, 1k 1/8W	
R634	YESRG126	Chip, 560k 1/8W	
R660	YESRG248	Chip, 390 1/8W	
R661	YESRG112	Chip, 2.7k 1/8W	
R662	YESRG120	Chip, 47k 1/8W	
R668	YESRG132	Chip, 0 1/4W	
R671	YESRG139	Chip, 180k 1/4W	
R672	YESRG096	Chip, 10k 1/8W	
R673	YESRG134	Chip, 1k 1/4W	

Ref. No.	Part No.	Part Name & Description	Remarks
R674	YESRG147	Chip, 4.7k Ω 1/4W	
R676	YESRG147	Chip, 4.7k Ω 1/4W	
R677	YESRG095	Chip, 1k Ω 1/8W	
R678	YESRG118	Chip, 470 Ω 1/8W	
R679	YESRG118	Chip, 470 Ω 1/8W	
R680	YESRG118	Chip, 470 Ω 1/8W	
R681	YESRG118	Chip, 470 Ω 1/8W	
R682	YESRG133	Chip,10 Ω 1/4W	
R690	YESRG095	Chip, 1k Ω 1/8W	
R691	YESRG096	Chip, 10k Ω 1/8W	
R692	YESRG112	Chip, 2.7k Ω 1/8W	
R693	YESRG112	Chip, 2.7k Ω 1/8W	
R694	YESRG134	Chip, 1k Ω 1/4W	
R695	YESRG112	Chip, 2.7k Ω 1/8W	
R696	YESRG219	Chip, 5.1k Ω 1/4W	
R697	YESRG219	Chip, 5.1k Ω 1/4W	
R698	YESRG219	Chip, 5.1k Ω 1/4W	
R699	YESRG217	Chip, 1.8k Ω 1/4W	
R703	YESRG099	Chip, 12k Ω 1/8W	
R704	YESRG098	Chip, 11k Ω 1/8W	
R710	YESRG110	Chip, 220k Ω 1/8W	
R711	YESRG129	Chip, 680k Ω 1/8W	
R712	YESRG120	Chip, 47k Ω 1/8W	
R713	YESRG097	Chip, 100k Ω 1/8W	
R714	YESRG095	Chip, 1k Ω 1/8W	
R715	YESRG095	Chip, 1k Ω 1/8W	
R716	YESRG120	Chip, 47k Ω 1/8W	
R720	YESRG131	Chip, 8.2k 1/8W	
R721	YESRG218	Chip, 4.3k 1/4W	
R722	YESRG191	Chip, 22k 1/4W	
R730	YESRG184	Chip, 4.3k 1/8W	
R731	YESRG131	Chip, 8.2k 1/8W	
R740	YESRG109	Chip, 22k 1/8W	
R751	YESRG120	Chip, 47k 1/8W	
R752	YESRG100	Chip, 1.5k 1/8W	
R760	YESRG095	Chip, 1k 1/8W	
R761	YESRG200	Chip, 3.3k 1/8W	
R762	YESRG095	Chip, 1k 1/8W	
R770	YESRG095	Chip, 1k 1/8W	
R790	YESRG095	Chip, 1k 1/8W	
R791	YESRG118	Chip, 470 1/8W	
CONNECTORs			
CN250	YESAE375	Jack, RCA*2	
CN601	YESAE419	Connector, 12P	
CN661	YESAE344	Connector, 18P	
CN701	YESAE351	Connector, 16P	

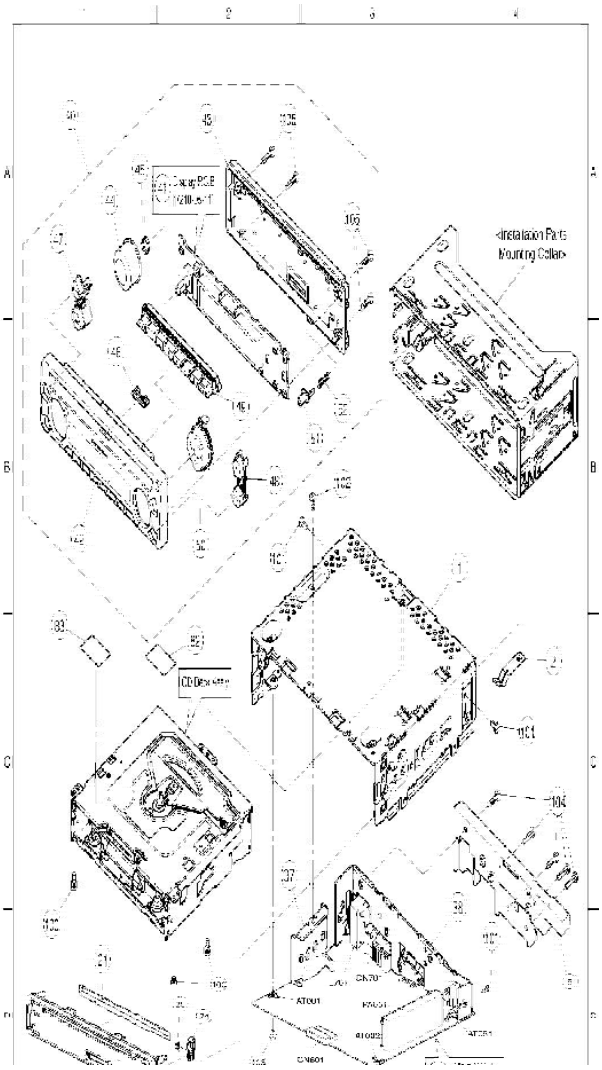
Ref. No.	Part No.	Part Name & Description	Remarks
COILs			
L051	YESLQ035	Inductor	
L052	YESLQ028	Inductor	
L401	YESLQ017	Inductor	
L402	YESLQ017	Inductor	
L504	YESLQ027	Inductor	
L680	YESLQ027	Inductor	
L701	YESLT030	Inductor	
L710	YESLQ012	Inductor	
CRYSTALs			
XL401	YESXL026	Crystal	
XL501	YESXL029	Crystal	
XL601	YESXL030	Crystal	
XL602	YESXL027	Crystal	
POSISTOR			
PH701	YESRTD011	Posistor	
SERGE PROTECTOR / VARISTOR			
Z050	YESRTD013	Serge Protector	
Z701	YESRTD012	Varistor	
[7210-05-11] Display Block			
IC's and TRANSISTORs			
IC901	C0HBA0000195	IC	
Q901	YESAN083	Transistor	
Q902	B1GDCFJJ0008	Transistor	
DIODEs			
D901	YESAD125	LED	
D902	YESAD125	LED	
D903	YESAD125	LED	
D904	YESAD125	LED	
D905	YESAD125	LED	
D908	YESAD125	LED	
D909	YESAD125	LED	
D910	YESAD125	LED	
D911	YESAD125	LED	
D912	YESAD125	LED	
D913	YESAD125	LED	
D914	YESAD125	LED	
D915	YESAD125	LED	
D916	YESAD125	LED	
D917	YESAD125	LED	
D920	YESAD145	LED	
D931	YESAD147	Zener Diode	
D937	YESAD143	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
CAPACITORs			
C901	YESCC385	Ceramic, 0.1 μ F 16WV	
C902	YESCC385	Ceramic, 0.1 μ F 16WV	
C903	YESCC293	Ceramic, 560pF 50WV	
C904	YESCC385	Ceramic, 0.1 μ F 16WV	
C908	YESCC385	Ceramic, 0.1 μ F 16WV	
RESISTORs			
R901	YESRG211	Chip, 4.7 Ω 1/10W	
R902	YESRG170	Chip, 47k Ω 1/10W	
R903	YESRG210	Chip, 470 Ω 1/10W	
R904	YESRG159	Chip, 1k Ω 1/4W	
R905	YESRG159	Chip, 1k Ω 1/4W	
R906	YESRG159	Chip, 1k Ω 1/4W	
R910	YESRG209	Chip, 2.2k Ω 1/10W	
R911	YESRG093	Chip, 0 Ω 1/8W	
R912	YESRG159	Chip, 1k Ω 1/4W	
R913	YESRG159	Chip, 1k Ω 1/4W	
R916	YESRG093	Chip, 0 Ω 1/8W	
R921	YESRG041	Chip, 270 Ω 1/4W	
R937	YESRG245	Chip, 2k Ω 1/10W	
R950	YESRG215	Chip, 430 Ω 1/8W	
R951	YESRG215	Chip, 430 Ω 1/8W	
R952	YESRG215	Chip, 430 Ω 1/8W	
R953	YESRG201	Chip, 620 Ω 1/8W	
R954	YESRG215	Chip, 430 1/8W	
R958	YESRG130	Chip, 820 1/8W	
CONNECTOR			
CN901	YESAE420	Connector, 12P	
SWITCHes			
SW901	YESAS122	Switch	
SW902	K0H1BA000445	Switch	
SW903	K0H1BA000445	Switch	
SW904	K0H1BA000445	Switch	
SW905	K0H1BA000445	Switch	
SW906	K0H1BA000445	Switch	
SW907	K0H1BA000445	Switch	
SW908	K0H1BA000445	Switch	
SW909	K0H1BA000445	Switch	
SW910	K0H1BA000445	Switch	
SW911	K0H1BA000445	Switch	
SW912	K0H1BA000445	Switch	
SW913	K0H1BA000445	Switch	
SW914	K0H1BA000445	Switch	
SW915	K0H1BA000445	Switch	

Ref. No.	Part No.	Part Name & Description	Remarks
SW916	K0H1BA000445	Switch	
SW917	K0H1BA000445	Switch	
LCD			
LD901	YESXDCM032	LCD	
Accessories			
PRINTINGs			
	YEFM285817	Operating Instructions (ENG)	
	YEFM285818	Operating Instructions (GER)	
	YEFM285819	Operating Instructions (FRE)	
	YEFM285820	Operating Instructions (DUT)	
	YEFM285821	Operating Instructions (SWE)	
	YEFM285822	Operating Instructions (ITA)	
	YEFM285823	Operating Instructions (SPA)	
	YEFM285824	Operating Instructions (DAN)	
	YEFM294179	Installation Instructions (A)	
	YEFM294180	Installation Instructions (B)	
INSTALLATION PARTS			
	YEP0FZ5700	Installation kit (Lock Cancel Plate, Mounting Bolt)	
	YEFX0217263	Mounting Collar	
	YEFC05658	Trim Plate	
	YEAJ02874	Power Connector	
MECHANICAL PARTS			
MISCELLANEOUS			
AT001	YESAT01031	Earth Terminal	
AT002	YESAT01031	Earth Terminal	
AT051	YM104C700ZA	Antenna Receptacle	
1	YESFA01073	Main Chassis	
2	YESFX005155	Ground Contactor	
4	YESFA05037	Bottom Cover	
5	YESFF01084	Heat Sink	
10	YESAP394	Main PCB w/ Components	RTL
20	YESFC02156	Escutcheon	
21	YESFS01089	Dust Felt	
22	YESFE13214	Push Button	
23	YESFX005156	Push Spring	
24	YESFX999064	Hook	
25	YESFX005150	Hook Spring	
37	YESFX021140	Regulator Bracket	
38	YESFA08036	Rear Plate	
40	YESSDF0183	Removable Face Plate Unit	RTL
41	YESAP476	Display PCB w/ Components	RTL
42	YESFC02236	Detachable Face Ass'y	
43	YESFA07012	Rear Cover	
44	YESFE02028	VOL Knob	
45	YESFX005131	Knob Spring	
46	YESFX001033	CD Indicator	
47	YESFE13215	Button (BAND SRC)	

Ref. No.	Part No.	Part Name & Description	Remarks
48	YESFE13216	Button (EJECT DISP)	
49	YESFE13217	Button (PRESET)	
50	YESFE13218	Button (TUNE/TRACK)	
51	YESFE13219	Relase Button	
52	YESFX005152	Release Spring	
82	YESFM01088	Laser Seal B	
83	YESFM01087	Laser Seal A	
100	YESJS01189	Screw, 2.6*4.0	
101	YESJS01188	Bind S Tite, 2.6*5.0	
102	YESJT03074	Bind Tapping, 2.6*8	
103	YESJS01190	Screw, 2.6 * 6.0	
104	YESJS01187	Bind Screw, 2.6 * 10	
105	YESJT03075	Tapping Screw, 2.0*8.0	

12. EXPLODED VIEW (Unit)



13. CD PLAYER PARTS LIST

Notes :

1. Be sure to make your orders of replacement parts according to this list.

2. Important safety notice: Components, identified by mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

3. **Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.**
4. **The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**

    - Order intake period is basically six months after the first shipment.

Ref. No.	Part No.	Part Name & Description	Remarks
[3032-14-13] CD Servo Block			
IC's and TRANSISTORs			
IC101	YESAM272	IC	
IC201	YESAM266	IC	
IC401	YESAM348	IC	
IC402	YESAM353	IC	
IC403	YESAM171	IC	
IC404	YESAM178	IC	
IC405	YESAM270	IC	
Q101	YESAN086	Transistor	
Q201	YESAN086	Transistor	
CAPACITORs			
C302	YESCC203	Ceramic, 220pF 50WV	
C101	YESCC187	Ceramic, 0.1 F 25WV	
C102	YESCC384	Ceramic, 0.033 F 50WV	
C103	YESCC206	Ceramic, 0.047 F 25WV	
C104	YESCC207	Ceramic, 0.001 F 50WV	
C106	YESCC204	Ceramic, 330pF 50WV	
C107	YESCC187	Ceramic, 0.1 F 25WV	
C108	YESCC206	Ceramic, 0.047 F 25WV	
C110	YESCC383	Ceramic, 0.33 F 10WV	
C112	YESCC209	Ceramic, 0.0033 F 50WV	
C113	YESCC187	Ceramic, 0.1 F 25WV	
C114	YESCC298	Ceramic, 0.015 F 50WV	
C115	YESCC187	Ceramic, 0.1 F 25WV	
C116	YESCC382	Ceramic, 680pF 50WV	
C117	YESCC207	Ceramic, 0.001 F 50WV	
C118	YESCC187	Ceramic, 0.1 F 25WV	
C119	YESCC187	Ceramic, 0.1 F 25WV	
C120	YESCC187	Ceramic, 0.1 F 25WV	
C121	YESCC187	Ceramic, 0.1 F 25WV	
C122	F1H1H101A231	Ceramic, 100pF 50WV	
C124	YESCC187	Ceramic, 0.1 F 25WV	
C125	YESCC187	Ceramic, 0.1 F 25WV	
C151	YESCC388	Electrolytic, 100 F 16WV	
C154	YESCC390	Electrolytic, 220 F 10WV	
C204	YESCC183	Ceramic, 0.0022 F 50WV	
C205	YESCC183	Ceramic, 0.0022 F 50WV	
C206	YESCC187	Ceramic, 0.1 F 25WV	
C210	YESCC187	Ceramic, 0.1 F 25WV	
C212	YESCC210	Ceramic, 1 F 16WV	
C251	YESCC390	Electrolytic, 220 F 10WV	
C252	YESCC390	Electrolytic, 220 F 10WV	
C253	YESCC389	Electrolytic, 470 F 6.3WV	
C301	YESCC203	Ceramic, 220pF 50WV	
C303	YESCC185	Ceramic, 0.01 F 50WV	
C304	YESCC185	Ceramic, 0.01 F 50WV	
C305	YESCC382	Ceramic, 680pF 50WV	
C306	YESCC382	Ceramic, 680pF 50WV	
C307	YESCC187	Ceramic, 0.1 F 25WV	
C351	YESCC381	Ceramic, 10 F 6.3WV	
C352	YESCC381	Ceramic, 10 F 6.3WV	
C353	YESCC391	Electrolytic, 100 F 16WV	
C354	YESCC390	Electrolytic, 220 F 10WV	
C401	YESCC187	Ceramic, 0.1 F 25WV	
C402	YESCC187	Ceramic, 0.1 F 25WV	
C403	YESCC187	Ceramic, 0.1 F 25WV	
C404	YESCC187	Ceramic, 0.1 F 25WV	
C405	YESCC187	Ceramic, 0.1 F 25WV	
C406	YESCC187	Ceramic, 0.1 F 25WV	
C407	YESCC187	Ceramic, 0.1 F 25WV	
C408	YESCC210	Ceramic, 1 F 16WV	
C409	YESCC187	Ceramic, 0.1 F 25WV	
C410	YESCC387	Ceramic, 0.47 F 25WV	
C411	YESCC187	Ceramic, 0.1 F 25WV	
C412	YESCC187	Ceramic, 0.1 F 25WV	
C413	YESCC187	Ceramic, 0.1 F 25WV	
C414	YESCC187	Ceramic, 0.1 F 25WV	
C415	YESCC187	Ceramic, 0.1 F 25WV	
C416	YESCC210	Ceramic, 1 F 16WV	
C417	YESCC187	Ceramic, 0.1 F 25WV	
C418	YESCC210	Ceramic, 1 F 16WV	
C419	YESCC187	Ceramic, 0.1 F 25WV	
C421	YESCC210	Ceramic, 1 F 16WV	

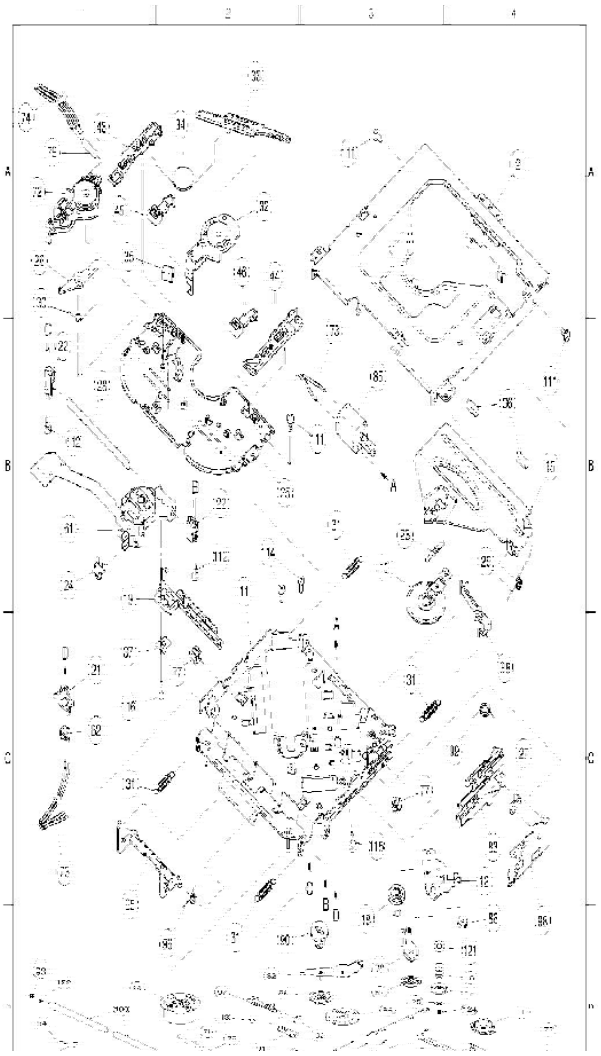
Ref. No.	Part No.	Part Name & Description	Remarks
C422	YESCC187	Ceramic, 0.1 μ F 25WV	
C426	YESCC187	Ceramic, 0.1 μ F 25WV	
C427	YESCC187	Ceramic, 0.1 μ F 25WV	
C451	YESCC389	Electrolytic, 470 μ F 6.3WV	
C452	YESCC389	Electrolytic, 470 μ F 6.3WV	
C453	YESCC389	Electrolytic, 470 μ F 6.3WV	
C454	YESCC388	Electrolytic, 100 μ F 16WV	
RESISTORs			
J101	ERJ8GX0R00V	Chip, 0 Ω 1/4W	
J102	ERJ8GX0R00V	Chip, 0 Ω 1/4W	
J103	ERJ8GX0R00V	Chip, 0 Ω 1/4W	
J104	ERJ8GX0R00V	Chip, 0 Ω 1/4W	
J105	ERJ8GX0R00V	Chip, 0 Ω 1/4W	
L102	YESRG241	Chip, 0 Ω	
L304	YESRG241	Chip, 0 Ω	
R101	YESRG234	Chip, 4.7 Ω 1/10W	
R102	ERJ3GEY0R00V	Chip, 0 Ω 1/4W	
R103	YESRG227	Chip, 2.2k Ω 1/10W	
R104	YESRG227	Chip, 2.2k Ω 1/10W	
R105	ERJ3GEY0R00V	Chip, 0 Ω 1/4W	
R106	YESRG230	Chip, 3.3k Ω 1/10W	
R107	YESRG230	Chip, 3.3k Ω 1/10W	
R108	ERJ3GEY0R00V	Chip, 0 Ω 1/4W	
R109	YESRG238	Chip, 56k Ω 1/10W	
R110	YESRG228	Chip, 22k 1/10W	
R114	YESRG240	Chip, 82k 1/10W	
R116	YESRG239	Chip, 820 1/10W	
R117	ERJ3GEY0R00V	Chip, 0 1/4W	
R118	YESRG223	Chip, 10k 1/10W	
R119	ERJ3GEY0R00V	Chip, 0 1/4W	
R120	ERJ3GEY0R00V	Chip, 0 1/4W	
R121	ERJ3GEY0R00V	Chip, 0 1/4W	
R122	ERJ3GEY0R00V	Chip, 0 1/4W	
R123	ERJ3GEY0R00V	Chip, 0 1/4W	
R124	YESRG224	Chip, 100k 1/10W	
R125	YESRG226	Chip, 220 1/10W	
R126	YESRG226	Chip, 220 1/10W	
R127	YESRG226	Chip, 220 1/10W	
R128	YESRG226	Chip, 220 1/10W	
R201	YESRG225	Chip, 1.5k 1/10W	
R202	ERJ3GEY0R00V	Chip, 0 1/4W	
R204	ERJ3GEY0R00V	Chip, 0 1/4W	
R205	ERJ3GEY0R00V	Chip, 0 1/4W	
R206	YESRG231	Chip, 33k 1/10W	
R207	ERJ3GEY0R00V	Chip, 0 1/4W	
R208	YESRG233	Chip, 47k 1/10W	
R209	ERJ3GEY0R00V	Chip, 0 1/4W	
R215	YESRG237	Chip, 5.6k 1/10W	
R216	YESRG237	Chip, 5.6k 1/10W	
R217	YESRG222	Chip, 1k 1/10W	
R218	YESRG237	Chip, 5.6k 1/10W	
R301	YESRG229	Chip, 330 1/10W	
R302	YESRG229	Chip, 330 1/10W	
R305	YESRG222	Chip, 1k 1/10W	
R306	YESRG222	Chip, 1k 1/10W	
R307	YESRG233	Chip, 47k 1/10W	
R308	YESRG233	Chip, 47k 1/10W	
R401	YESRG223	Chip, 10k 1/10W	
R402	YESRG223	Chip, 10k 1/10W	
R403	YESRG223	Chip, 10k 1/10W	
R404	YESRG233	Chip, 47k 1/10W	
R405	YESRG232	Chip, 4.7k 1/10W	
R406	YESRG226	Chip, 220 1/10W	
R407	YESRG230	Chip, 3.3k 1/10W	
R408	ERJ3GEY0R00V	Chip, 0 1/4W	
R409	ERJ3GEY0R00V	Chip, 0 1/4W	
R410	YESRG223	Chip, 10k 1/10W	
R411	YESRG226	Chip, 220 1/10W	
R412	YESRG230	Chip, 3.3k 1/10W	
R413	YESRG232	Chip, 4.7k 1/10W	
R414	YESRG232	Chip, 4.7k 1/10W	
R415	YESRG232	Chip, 4.7k 1/10W	
R416	YESRG232	Chip, 4.7k 1/10W	
R417	YESRG223	Chip, 10k 1/10W	
R419	YESRG226	Chip, 220 1/10W	
R420	YESRG236	Chip, 560 1/10W	
R421	ERJ3GEY0R00V	Chip, 0 1/4W	
R422	YESRG224	Chip, 100k 1/10W	
R423	YESRG235	Chip, 56 1/10W	
R424	YESRG235	Chip, 56 1/10W	
R425	YESRG223	Chip, 10k 1/10W	
R426	YESRG223	Chip, 10k 1/10W	
R427	YESRG222	Chip, 1k 1/10W	
R428	YESRG222	Chip, 1k 1/10W	
R429	YESRG222	Chip, 1k 1/10W	
R430	YESRG222	Chip, 1k 1/10W	
R431	YESRG222	Chip, 1k 1/10W	
R432	YESRG222	Chip, 1k 1/10W	
R433	YESRG227	Chip, 2.2k 1/10W	
R435	YESRG221	Chip, 100 1/10W	
R436	YESRG221	Chip, 100 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R437	YESRG221	Chip, 100 Ω 1/10W	
R438	YESRG221	Chip, 100 Ω 1/10W	
R439	YESRG221	Chip, 100 Ω 1/10W	
R440	YESRG221	Chip, 100 Ω 1/10W	
R441	YESRG221	Chip, 100 Ω 1/10W	
CONNECTORs			
CN101	YESAE345	Connector 18P	
CN102	YESAE350	Connector 16P	
COILs			
L101	YESLQ011	Inductor	
L201	YESLQ034	Inductor	
L301	YESLQ036	Inductor	
L302	YESLQ036	Inductor	
L401	YESLQ014	Inductor	
L402	YESLQ014	Inductor	
L403	YESLQ014	Inductor	
L404	YESLQ033	Inductor	
L405	YESLQ033	Inductor	
L406	YESLQ033	Inductor	
CRYSTAL			
X401	YESXL018	Crystal	
RESISTOR NETWORKs			
RA401	YESXA003	Resistor Network, 56 Ω * 4	
RA402	YESXA003	Resistor Network, 56 * 4	
RA403	YESXB014	Resistor Network, 0 * 4	
RA404	YESXB014	Resistor Network, 0 * 4	
RA405	YESXA003	Resistor Network, 56 * 4	
RA406	YESXA003	Resistor Network, 56 * 4	
RA407	YESXA003	Resistor Network, 56 * 4	
RA408	YESXA003	Resistor Network, 56 * 4	
RA409	YESXA003	Resistor Network, 56 * 4	
RA410	YESXA003	Resistor Network, 56 * 4	
RA411	YESXA003	Resistor Network, 56 * 4	
RA412	YESXA003	Resistor Network, 56 * 4	
MECHANICAL PARTS			
MISCELLANEOUS			
1	YESFX046136	Frame	
2	YESFX046137	Top Cover	
3	YERFS04003	Damper F	
4	YERFS04004	Damper R	
11	YESFA01075	Chassis Rivet Ass'y	
12	YERFX046001	Change Plate Rivet Ass'y	

Ref. No.	Part No.	Part Name & Description	Remarks
13	YERFX007001	Clamper Ass'y	
14	YESAK01041	Spindle Motor Ass'y	
15	YERFX046002	Clamper Arm	
16	YERFX005001	Changer Gear Spring	
17	YERFX03001	Changer Gear 2	
18	YERFX03002	Feed Gear	
19	YERFX03003	Feed Rack M	
20	YERFX046003	Changer Lock Lever	
21	YERFW04001	Feed Switch Holder	
22	YERFW04002	PU Shaft Holder	
23	YERFX005002	Clamper Sub Spring	
24	YERFW04003	FD Sub Holder	
25	YESFX046139	Top Plate	
26	YERFX046004	Select Lock Arm	
27	YERFX046006	Slide Hook	
28	YERFW01001	PU Shaft	
29	YERFX005003	Clamper Arm Spring	
30	YERFX005004	Select Lock Arm Spring	
31	YERFX005013	Suspension Spring	
32	YESFX046140	Select Arm R	
33	YERFX03004	Link Plate	
34	YESFX005137	Link Plate Spring	
35	YERFS01001	Cushion F	
36	YERFS01002	Cushion R	
37	YERFX005014	Feed Spring Plate	
38	YERFX046005	Trigger Arm	
43	YERFX046008	Select Plate L	
44	YERFX046009	Select Plate R	
45	YERFX046010	Select Piece L	
46	YERFX046011	Select Piece R	
61	YESSZ1093	Optical Pick-up Ass'y	
62	YERAS0001	Detect Switch	
71	YESAP494	Servo PCB w/ Components	RTL
72	YERAS0002	Mode Switch	
73	YESAJ07014	LD Wire	
74	YESAJ07015	SW Wire	
75	YESAJ07016	SP Wire	
77	YERFX999001	Wire Clamper	
78	YESFX024021	Wire Tube SPM	
79	YESFX024022	Wire Tube MSW	
81	YERFX03005	Roller Shaft Ass'y	
82	YERFX046012	Loading Gear Plate Rivet Ass'y	
83	YERFX046013	Loading Plate Ass'y	
84	YESFX046173	Lock Arm Rivet Ass'y	
85	YESAK01042	Loading/Feed Motor Ass'y	
86	YERFX03006	Loading Gear 1	
87	YERFX03007	Loading Gear 2	
88	YERFX03008	Loading Gear 3	
89	YERFX03009	Loading Gear 4	
90	YERFX03010	Loading Gear 5	
91	YERFX03011	Loading Gear 6	
92	YERFX03012	Loading Gear 7	
93	YESFW05023	Roller Guide	
94	YERFX005007	RIler Guide Spring	
95	YERFX046015	Disk Stopper Arm	
96	YERFX005008	Disk Stop Arm Spring	
97	YERFX046016	LD Gear Bracket	

Ref. No.	Part No.	Part Name & Description	Remarks
98	YESFX046174	L Slide Plate	
99	YERFX005009	Loading Plate Spring	
100	YESFX046150	Loading Roller	
101	YESJS01175	Collar Screw	
111	YERJT01001	Tapping Screw 2*3	
112	YERJT01002	Tapping Screw 2*4	
113	YEJT03117	Tapping Bind Screw 2*4	
114	YERJS01002	Camera Screw 1.7*1.8	
115	YERJS01003	Camera Screw 2*2	
116	YERJS01004	Camera Tapping Screw 1.7*5	
118	YESJS01148	Screw 2*4	
121	YERJW01001	P Washer 3.5*8*0.3	
122	YERJW01002	HL Washer 3.5*8*0.3	
123	YERJW01003	Lumilar Washer 3.1*6*0.1	
124	YEJE01028	E Ring S 1.5	
125	YERJW01005	P Washer 2.1*4*0.3	

14. EXPLODED VIEW (CD Deck)



15. WIRING DIAGRAM

15.1. Main Block (Top View)

15.2. Main Block (Bottom View)

15.3. Display Block

15.4. CD Servo Block (Top View)

15.5. CD Servo Block (Bottom View)

16. SCHEMATIC DIAGRAM

16.1. Main Block

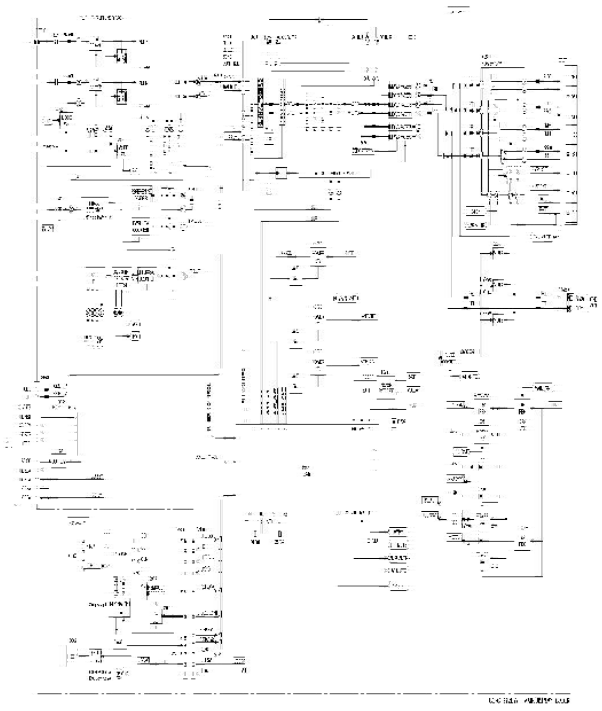
16.2. Display Block

16.3. CD Servo Block

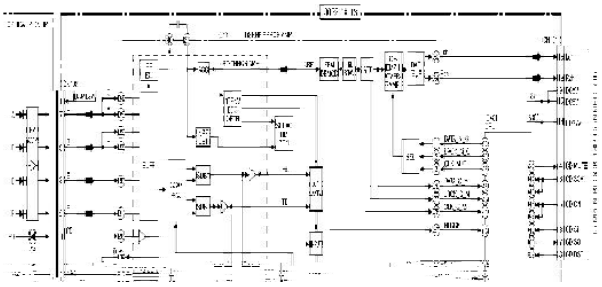
THIS PAGE IS JUST FOR THE PAGE LAYOUT USE ONLY.

17. BLOCK DIAGRAM

17.1. Main Block



17.2. CD Servo Block



18. SCHEMATIC DIAGRAM for Printing with A4 Size

18.1. Main Block (Left Side)

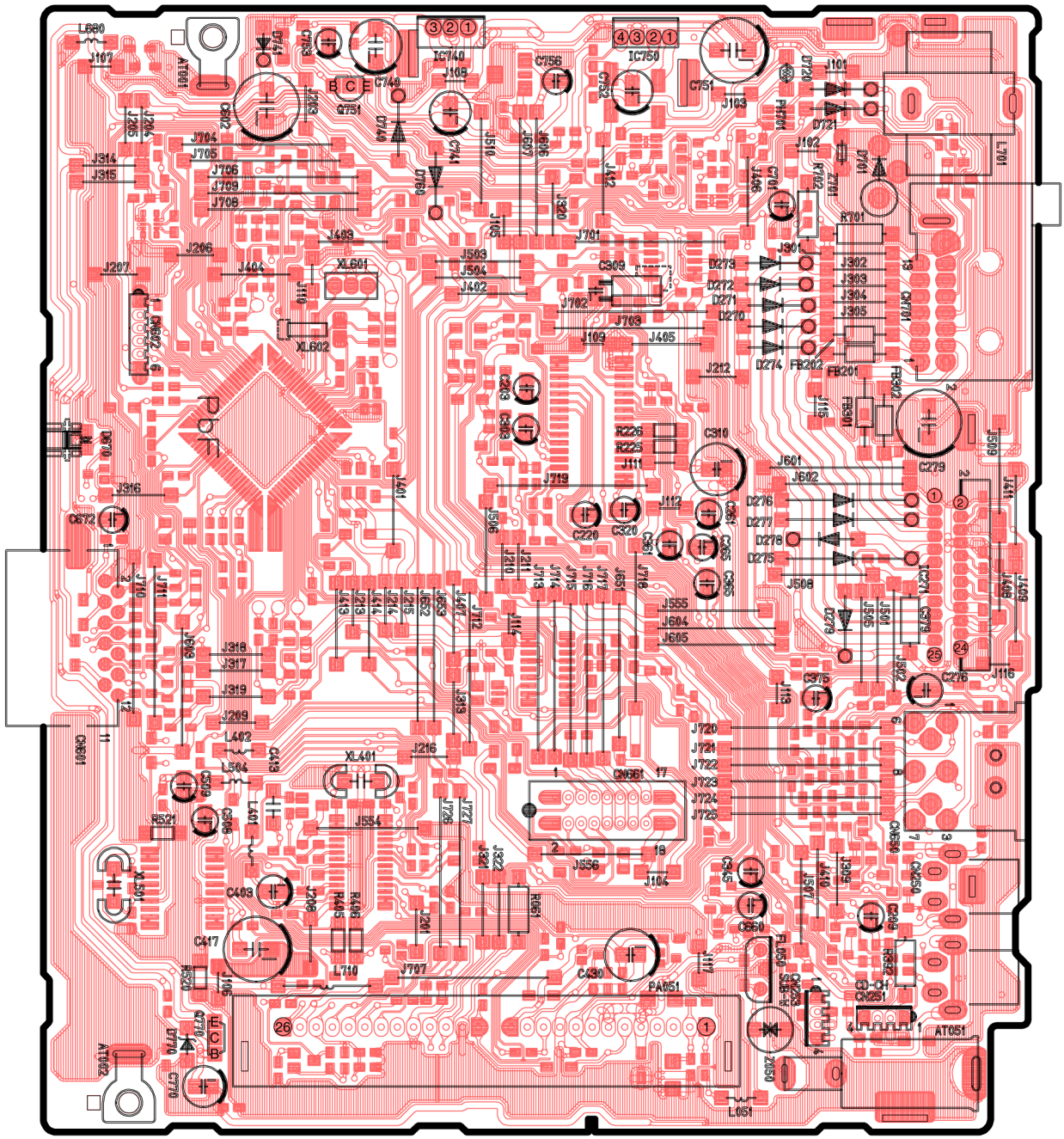
18.2. Main Block (Right Side)

18.3. Display Block (Left Side)

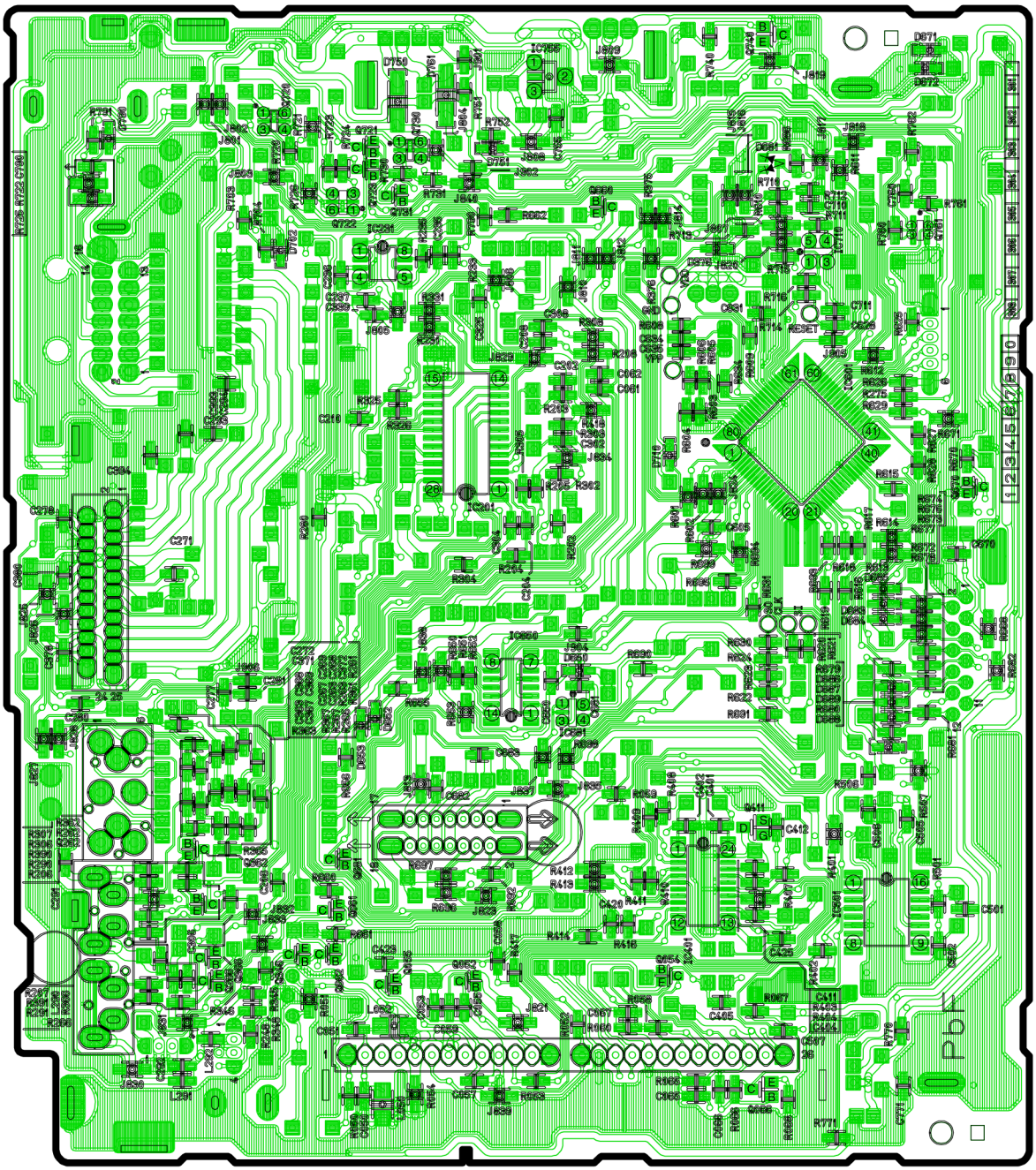
18.4. Display Block (Right Side)

18.5. CD Servo Block (Left Side)

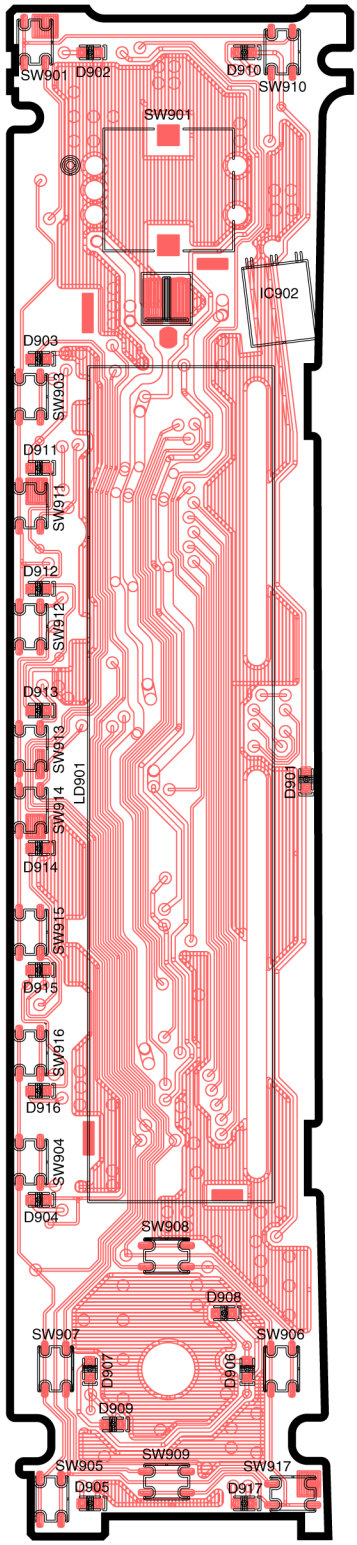
18.6. CD Servo Block (Right Side)



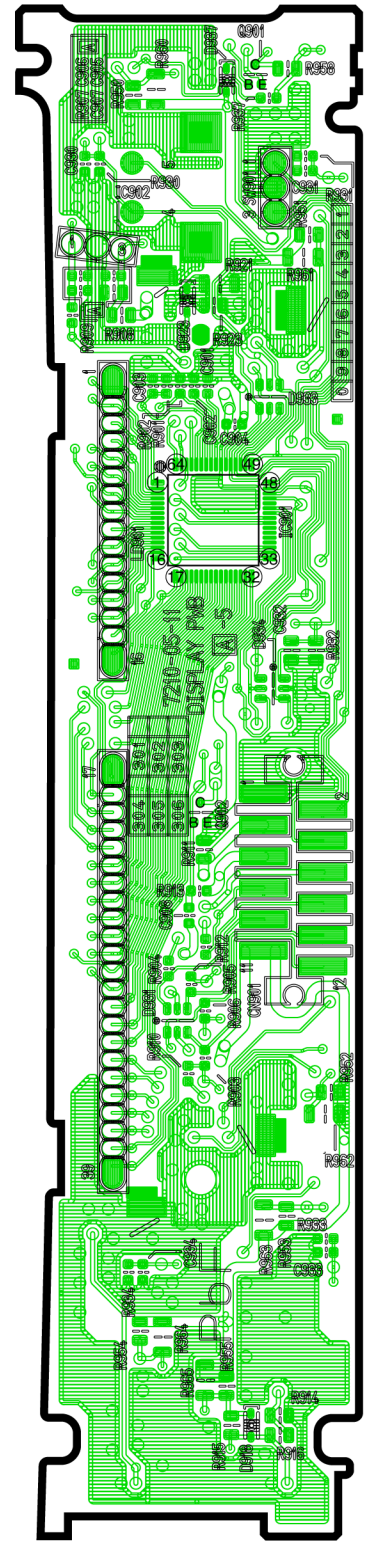
[7210-02-11] [Top View]

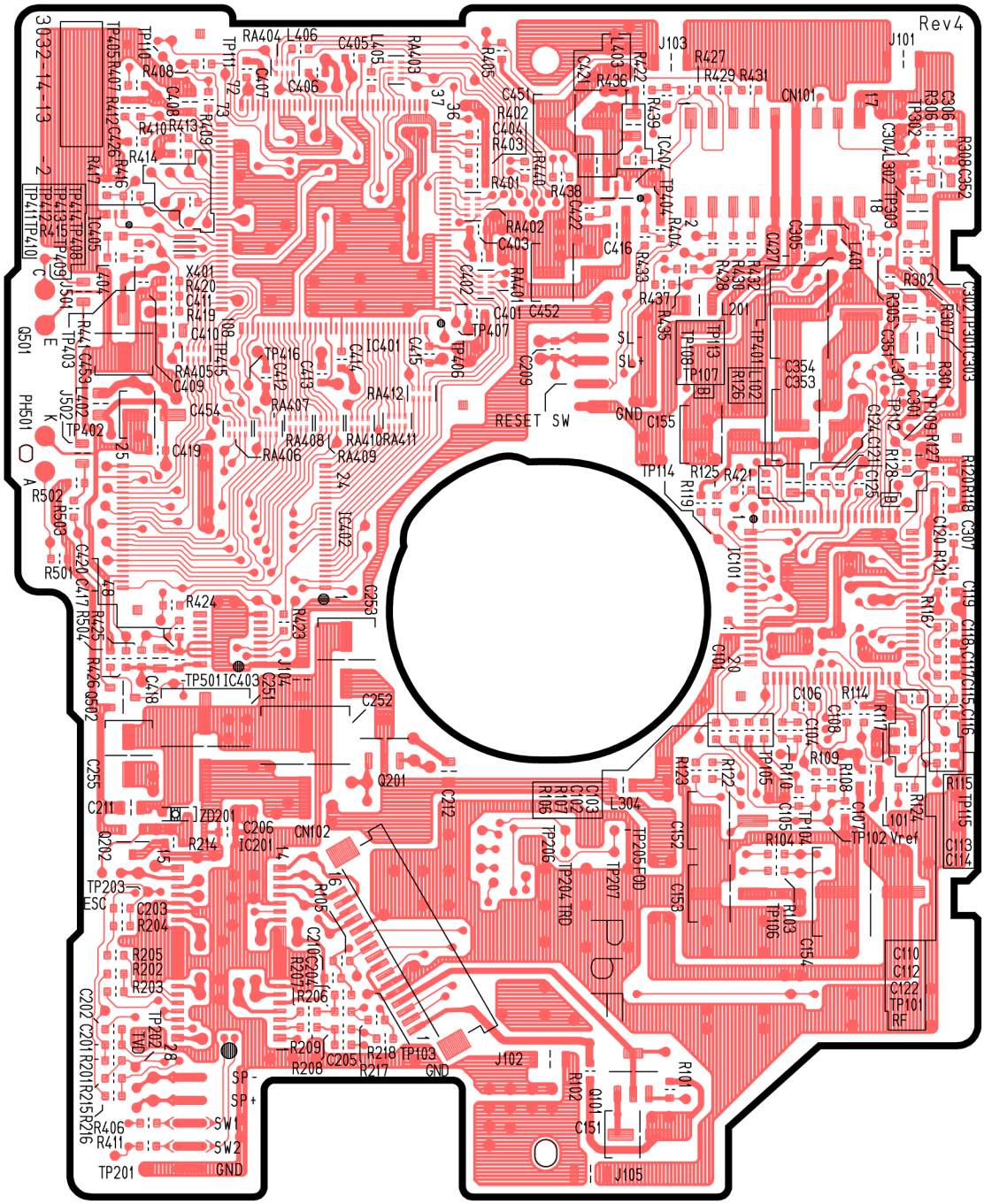


[7210-02-11] [Bottom View]

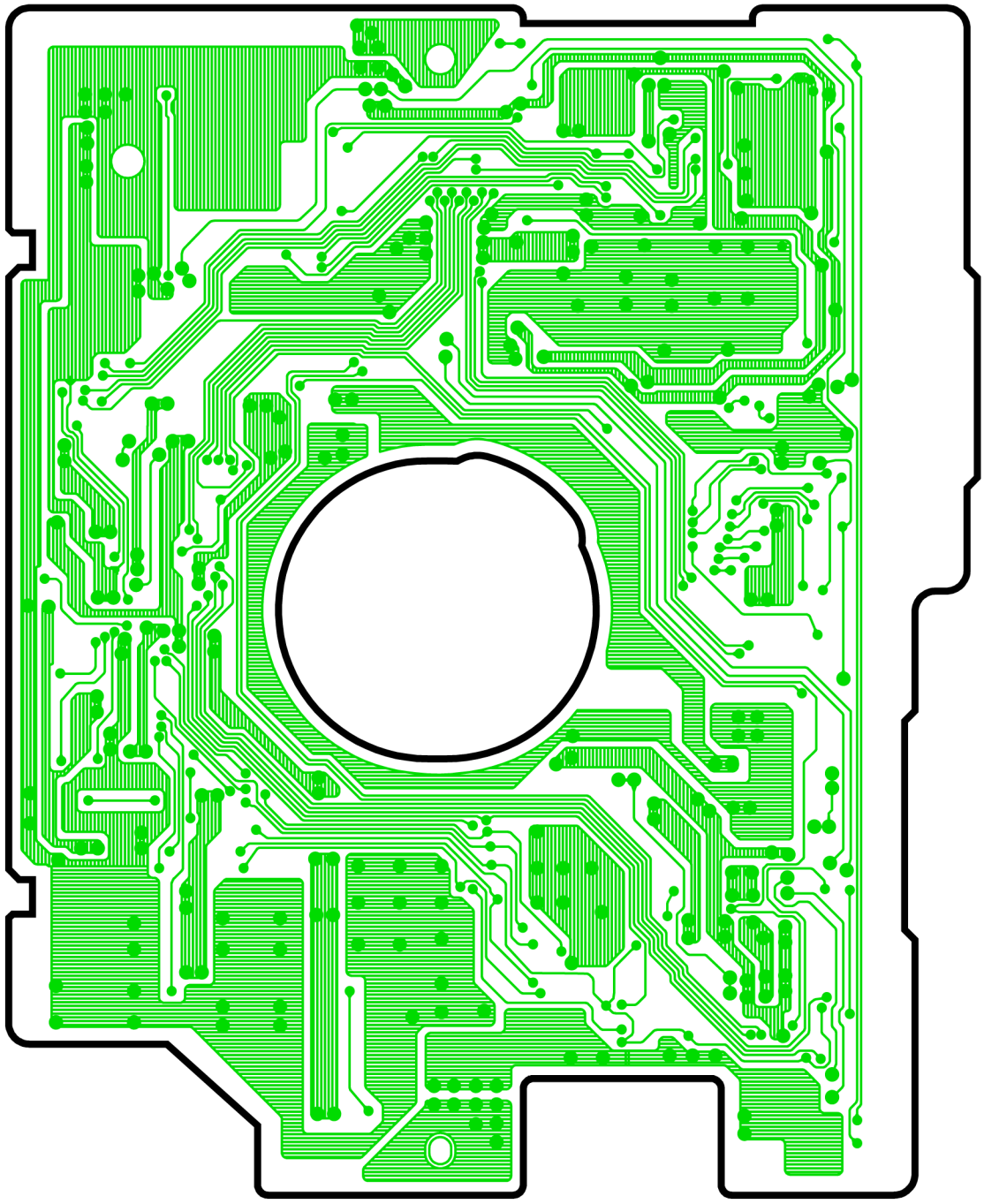


[7210-05-11]
[Top View]





[3032-14-13] [Top View]

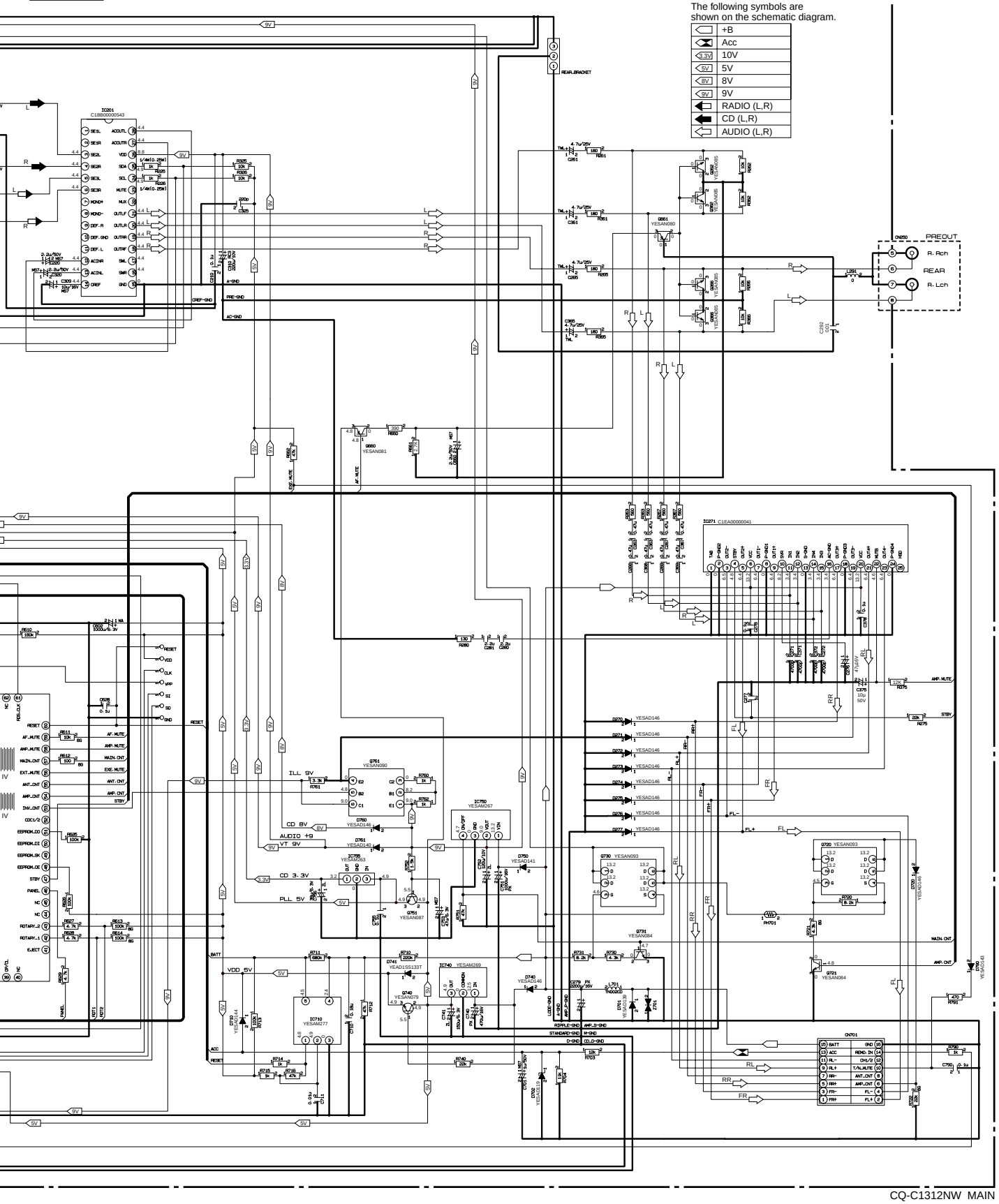


[3032-14-13] [Bottom View]

7210-02-11

The following symbols are shown on the schematic diagram.

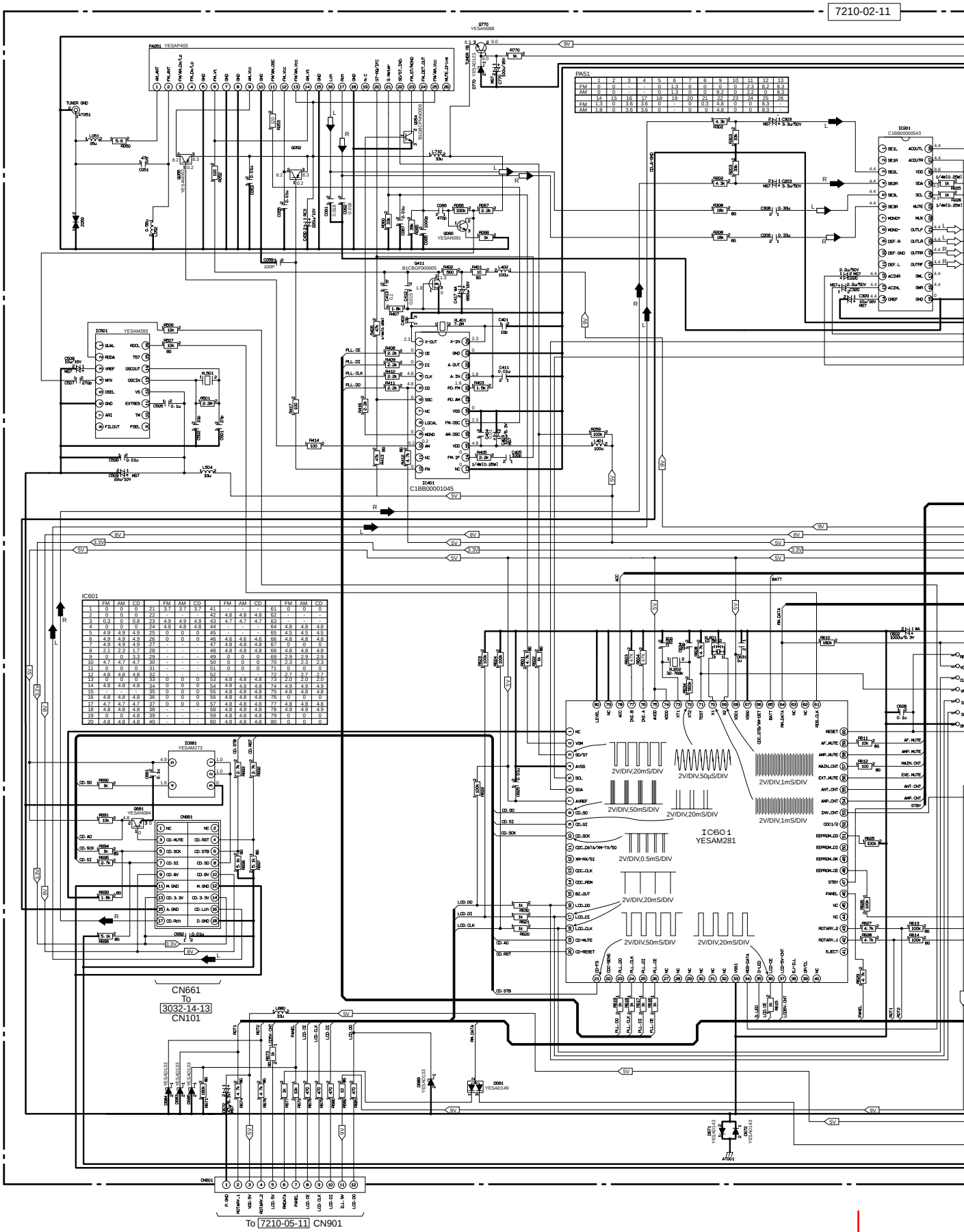
	+B
ACC	Acc
3.3V	10V
5V	5V
8V	8V
9V	9V
	RADIO (L,R)
	CD (L,R)
	AUDIO (L,R)

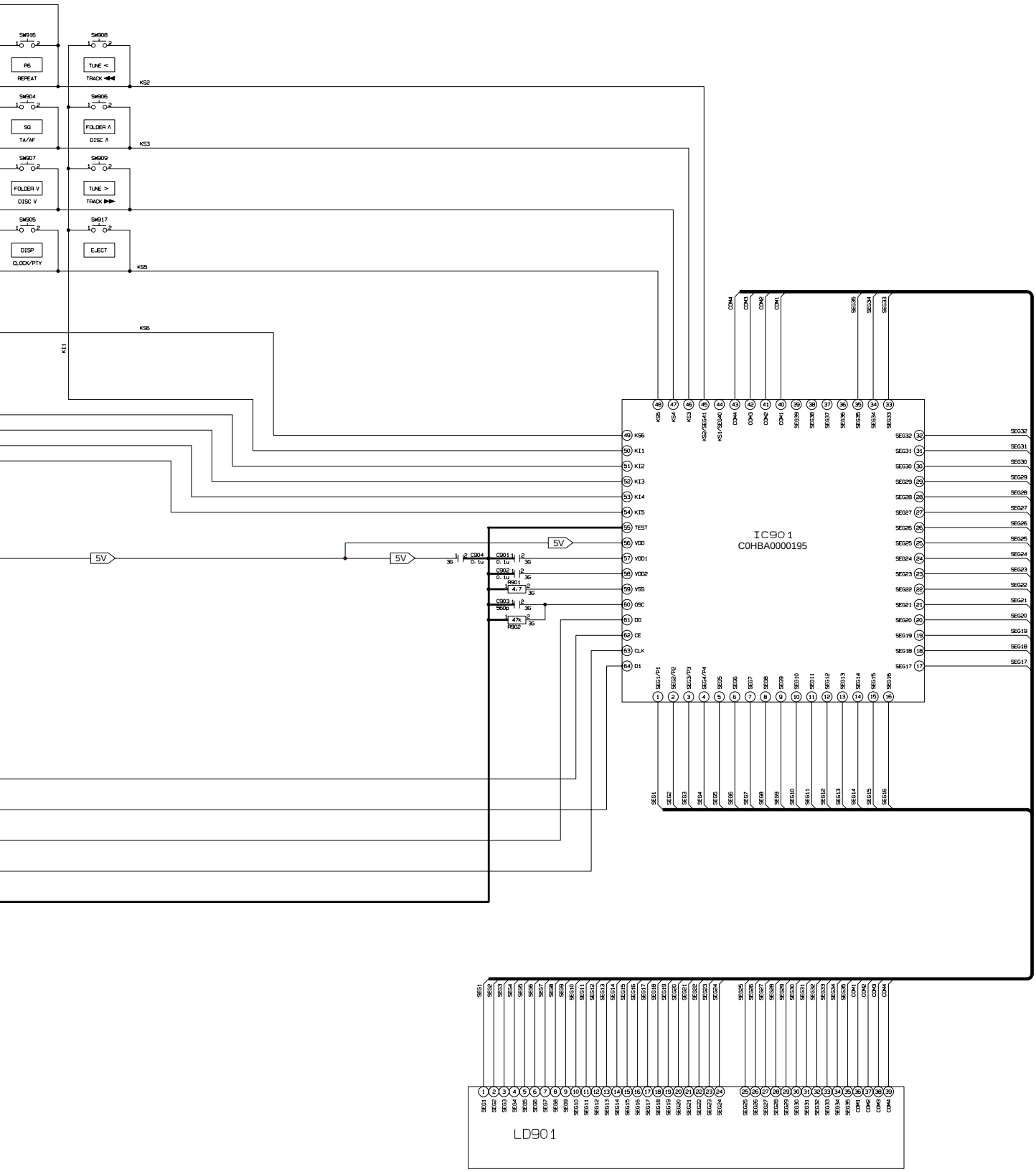


CQ-C1312NW MAIN

16 SCHEMATIC DIAGRAM

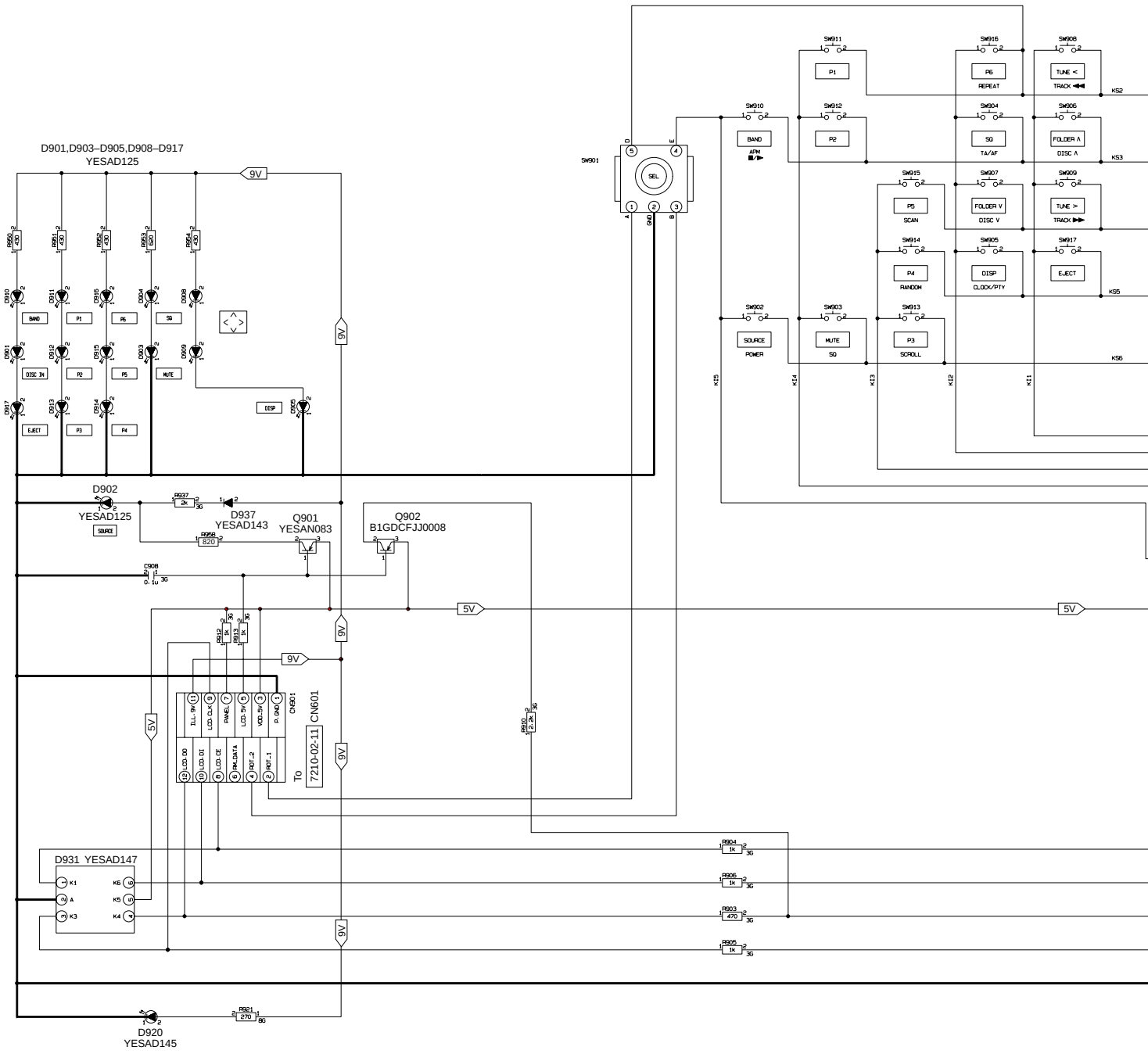
16.1. Main Block




SW916
P6
REPEAT
SW908
TUNE <
TRACK
SW904
SQ
TA/AF
SW906
FOLDER ∧
DISC ∧
SW907
FOLDER ∨
DISC ∨
SW909
TUNE >
TRACK
SW905
DISP
CLOCK/PTY
SW917
EJECT
KS2
KS3
KS5
KS6
KI1
5V
C904
0.1u
C901
0.1u
C902
0.1u
R901
4.7
C903
560p
R902
47k
IC901
C0HBA0000195
KS6
KI1
KI2
KI3
KI4
KI5
TEST
VDD
VDD1
VDD2
VSS
OSC
DO
CE
CLK
DI
KS5/SEG41
KS1/SEG40
SEG1/P1
SEG2/P2
SEG3/P3
SEG4/P4
LD901

16.2. Display Block

7210-05-11

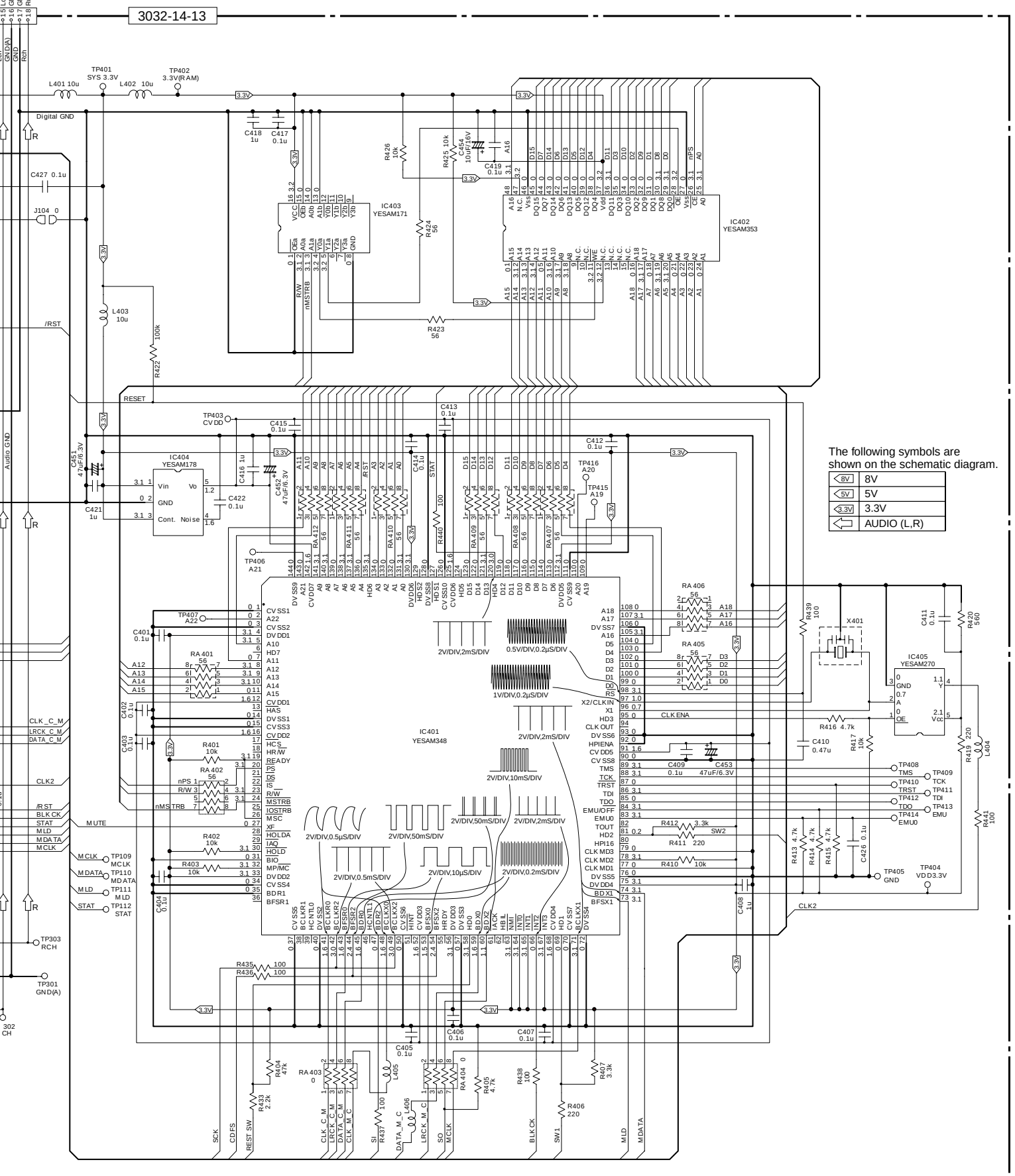


The following symbols are shown on the schematic diagram.

9V	9V
5V	5V

ector

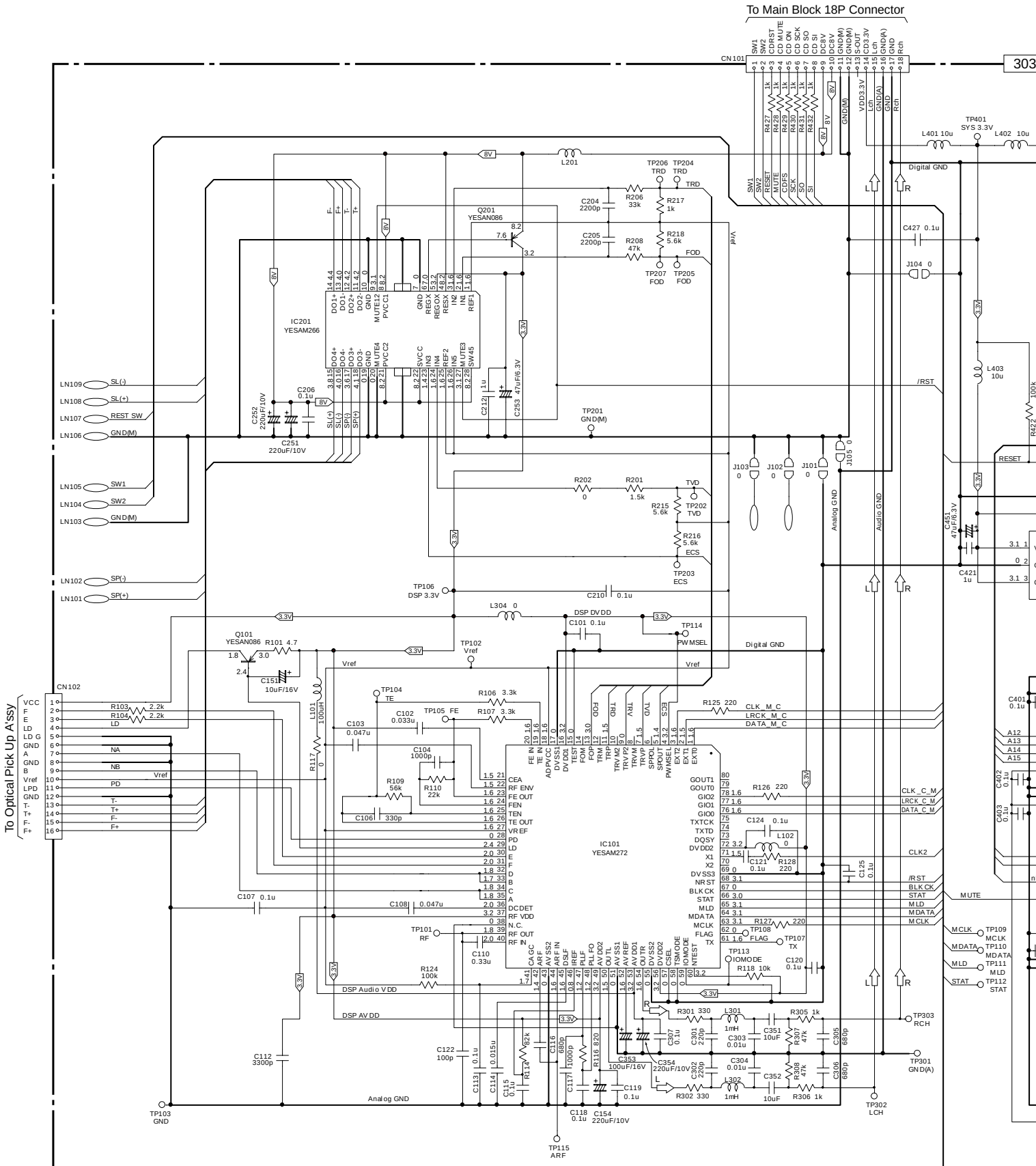
3032-14-13



The following symbols are shown on the schematic diagram.

8V	8V
5V	5V
3.3V	3.3V
	AUDIO (L,R)

16.3. CD Servo Block



The following symbols are shown on the schematic diagram.

	+B
ACC	Acc
3.3V	10V
5V	5V
8V	8V
9V	9V
	RADIO (L,R)
	CD (L,R)
	AUDIO (L,R)

PA51

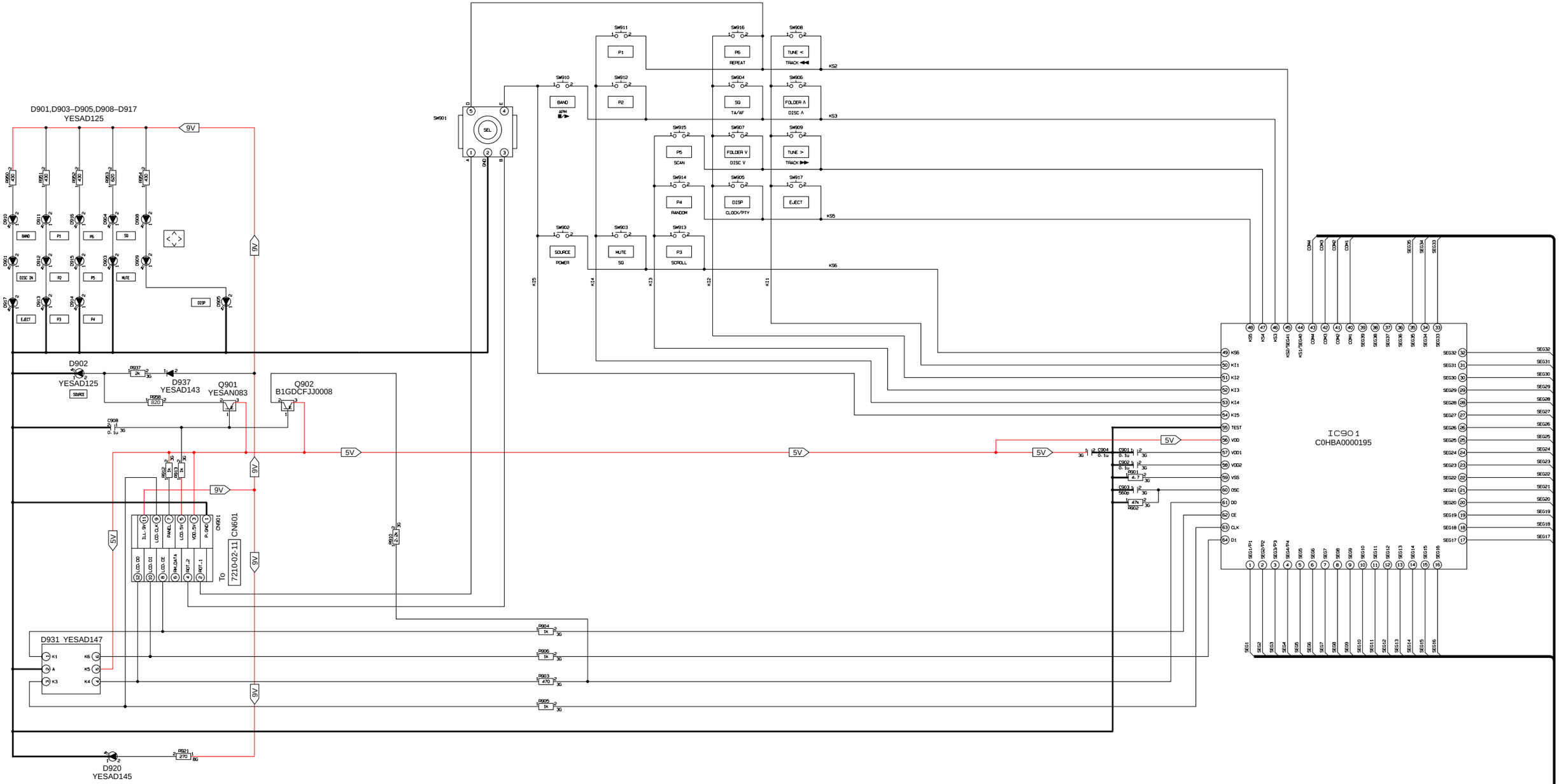
	1	2	3	4	5	6	7	8	9	10	11	12	13
FM	0	0	-	-	0	1.3	0	0	0	0	2.3	8.2	8.3
AM	0	0	-	-	0	1.3	0	0	8.2	0	2.2	0	8.3
	14	15	16	17	18	19	20	21	22	23	24	25	26
FM	1.3	0	3.6	3.6	0	-	0	0.3	4.8	0	0	8.3	-
AM	1.8	0	3.6	3.6	0	-	0	0	4.8	0	0	8.3	-

IC601

	FM	AM	CD		FM	AM	CD		FM	AM	CD		FM	AM	CD
1	0	0	0	21	3.7	3.7	3.7	41	-	-	-	61	0	0	0
2	0	0	0	22	-	-	-	42	4.8	4.8	4.8	62	-	-	-
3	0.3	0	0.8	23	4.9	4.9	4.9	43	4.7	4.7	4.7	63	-	-	-
4	0	0	0	24	4.8	4.8	4.8	44	-	-	-	64	4.8	4.8	4.8
5	4.9	4.9	4.9	25	0	0	0	45	-	-	-	65	4.5	4.5	4.5
6	4.9	4.9	4.9	26	0	0	0	46	4.6	4.6	4.6	66	4.8	4.8	4.8
7	4.9	4.9	4.9	27	-	-	-	47	4.8	4.8	4.8	67	0	0	0
8	2.1	2.3	1.7	28	-	-	-	48	4.8	4.8	4.8	68	4.8	4.8	4.8
9	0	0	3.3	29	-	-	-	49	0	0	0	69	2.9	2.9	2.9
10	4.7	4.7	4.7	30	-	-	-	50	0	0	0	70	2.3	2.3	2.3
11	0	0	0	31	-	-	-	51	0	0	0	71	0	0	0
12	4.8	4.8	4.8	32	-	-	-	52	-	-	-	72	2.7	2.7	2.7
13	0	0	0	33	0	0	0	53	4.8	4.8	4.8	73	2.0	2.0	2.0
14	4.8	4.8	4.8	34	0	0	0	54	4.8	4.8	4.8	74	4.9	4.9	4.9
15	-	-	-	35	0	0	0	55	4.8	4.8	4.8	75	4.8	4.8	4.8
16	4.8	4.8	4.8	36	0	0	0	56	4.8	4.8	4.8	76	0	0	0
17	4.7	4.7	4.7	37	0	0	0	57	4.8	4.8	4.8	77	4.8	4.8	4.8
18	4.8	4.8	4.8	38	-	-	-	58	4.8	4.8	4.8	78	4.9	4.9	4.9
19	0	0	4.8	39	-	-	-	59	4.8	4.8	4.8	79	0	0	0
20	4.8	4.8	4.8	40	-	-	-	60	4.8	4.8	4.8	80	0	0	0

CN661 To 3032-14-13 CN101

To 7210-05-11 CN901



The following symbols are shown on the schematic diagram.

◇9V	9V
◇5V	5V

3032-14-13

To Main Block 18P Connector

CN101

To Optical Pick Up A'ssy

CN102

IC101 YESAM272

IC201 YESAM266

IC402 YESAM353

IC403 YESAM171

IC404 YESAM178

IC405 YESAM270

IC401 YESAM348

Q101 YESAN086

Q201 YESAN086

L201

L401 10u

L402 10u

L403 10u

L101 100uH

L102 0

L301 1mH

L302 1mH

L304 0

L405

L406

TP401 SYS 3.3V

TP402 3.3V(RAM)

TP403 CVDD

TP404 VD D3.3V

TP405 GND

TP406 A21

TP407 A22

TP408 TMS

TP409 TCK

TP410 TRST

TP411 TDI

TP412 TDO

TP413 EMU

TP414 EMU0

TP415 A19

TP416 A20

TP101 RF

TP102 Vref

TP103 GND

TP104 TE

TP105 FE

TP106 DSP 3.3V

TP107 TX

TP108 FLAG

TP109 MCLK

TP110 MDATA

TP111 MLD

TP112 STAT

TP114 PWMSEL

TP115 ARF

TP201 GND(M)

TP202 TVD

TP203 ECS

TP204 TRD

TP205 FOD

TP206 TRD

TP207 FOD

TP301 GND(A)

TP302 LCH

TP303 RCH

LN101 SP(+)

LN102 SP(-)

LN103 GND(M)

LN104 SW2

LN105 SW1

LN106 GND(M)

LN107 REST SW

LN108 SL(+)

LN109 SL(-)

VCC

F

E

LD

LD G

GND

A

GND

B

Vref

LPD

GND

T-

T+

F-

F+

NA

NB

Vref

PD

T-

T+

F-

F+

Digital GND

Analog GND

Audio GND

DSP AV DD

DSP Audio VDD

DSP DVDD

CVDD

Vref

/RST

RESET

MUTE

MCLK

MDATA

MLD

STAT

CLK2

CLK_C_M

LRCK_C_M

DATA_C_M

SCK

CD FS

REST SW

SI

SO

MCLK

BLK CK

SW1

MLD

MDATA

CLK ENA

The following symbols are shown on the schematic diagram.

8V	8V
5V	5V
3.3V	3.3V
	AUDIO (L,R)

CQ-C1312NW CD DECK